

To: Candace_M_Vahlsing[Ex. 6 - Personal Privacy]
Kevin_W_Welsh[Ex. 6 - Personal Privacy]
Lourdes.Maurice@faa.gov[Lourdes.Maurice@faa.gov]; Samulski, Michael[samulski.michael@epa.gov];
Manning, Bryan[manning.bryan@epa.gov]; McCabe, Janet[McCabe.Janet@epa.gov];
Dan_G_Utech[Ex. 6 - Personal Privacy]
Richard_Duke[Ex. 6 - Personal Privacy]
Ali_A_Zaidi[Ex. 6 - Personal Privacy]; PBodnar[Ex. 6 - Personal Privacy]
Hengst, Benjamin[Hengst.Benjamin@epa.gov]; Charmley, William[charmley.william@epa.gov]; LeFranc,
Maurice[LeFranc.Maurice@epa.gov]; Rich.Swayze@faa.gov[Rich.Swayze@faa.gov];
carl.burleson@faa.gov[carl.burleson@faa.gov]; shoshana.lew@dot.gov[shoshana.lew@dot.gov];
Atkinson, Emily[Atkinson.Emily@epa.gov];
Chad_S_Whiteman[Ex. 6 - Personal Privacy]
Cc: Shara_Z_Mohtadi[Ex. 6 - Personal Privacy]
Arthur.Rypinski@dot.gov[Arthur.Rypinski@dot.gov];
Robert_E_Golden[Ex. 6 - Personal Privacy]
OECC[Ex. 6 - Personal Privacy]; Laszlo.Windhoffer@faa.gov[Laszlo.Windhoffer@faa.gov];
maryalice.locke@faa.gov[maryalice.locke@faa.gov]; curtis.holsclaw@faa.gov[curtis.holsclaw@faa.gov]
From: Ralph.Iovinelli@faa.gov
Sent: Fri 1/29/2016 10:43:21 PM
Subject: Int'l Aircraft CO2 Emissions Standard to US Domestic Regulation

Dear All,

First, please pass this invitation to those I missed.

This email follows-up on the action item and discussions from the EOP telecon on Tuesday, 1/26 at 530pm. There will be a joint OIRA/EPA/FAA meeting at the OIRA offices located at **1800 G Street, NW, 9th floor** on **Thursday, February 18** from **11am to 12:30pm**.

The objective of this meeting is to determine the most efficient way to support the domestic rulemaking process of the aircraft CO2 emission standard, with specific attention to the cost benefits analysis completed for the ICAO international aircraft CO2 emissions standard.

DRAFT AGENDA:

1. The FAA will come prepared with 2 presentations (20 min each) covering (1) the ICAO Cost Effectiveness Analysis and (2) the US Cost Benefits Analysis featuring how the social cost of carbon was handled.
2. OIRA presentation (10 min) covering the requirements of OMB Circular A-4 and related aspects of social cost of carbon.
3. EPA presentation (10 min) on the proposal schedule, analyses, and process steps of the aircraft GHG emissions rulemaking process
4. Discussion on most efficient way forward

Please do not hesitate to contact Chad Whiteman [Ex. 6 - Personal Privacy] or myself with questions.

Best Regards,
Ralph Iovinelli

Manager, Emissions Division (AEE-300)
Office of Environment and Energy
Federal Aviation Administration
800 Independence Ave., SW
Washington, DC 20591

+1-202-267-3566 office

Ex. 6 - Personal Privacy
ralph.iovinelli@faa.gov

To: Charmley, William[charmley.william@epa.gov]; Samulski, Michael[samulski.michael@epa.gov]
From: Lourdes.Maurice@faa.gov
Sent: Mon 1/25/2016 11:21:58 PM
Subject: Fwd: Call with EU on ICAO
[US Position-CO2 Standard dpc NSC.PPTX](#)
[ATT00001.htm](#)

Ex. 5 - Deliberative Process

Appreciate your help. Lourdes

Sent from my iPhone

Begin forwarded message:

From: "Vahlsing, Candace M. EOP/WHO" **Ex. 6 - Personal Privacy**
Date: January 25, 2016 at 6:09:35 PM EST
To: "Welsh, Kevin W. EOP/NSC" **Ex. 6 - Personal Privacy** "'McCabe, Janet'"
<McCabe.Janet@epa.gov>, "Charmley, William" <charmley.william@epa.gov>,
"Lourdes.Maurice@faa.gov" <Lourdes.Maurice@faa.gov>
Cc: "Duke, Rick EOP/CEQ" **Ex. 6 - Personal Privacy**
Subject: RE: Call with EU on ICAO

Janet/Lourdes,

We'd like to use the attached deck to walk through our position with the EU on the teleconference tomorrow, and are considering sending it to them a head of the meeting. Would be great if your team's could give it a look in the am.

-----Original Message-----

From: Welsh, Kevin **Ex. 6 - Personal Privacy**
Sent: Monday, January 25, 2016 5:10 PM
To: 'McCabe, Janet' <McCabe.Janet@epa.gov>; Charmley, William
<charmley.william@epa.gov>; 'Lourdes.Maurice@faa.gov' <Lourdes.Maurice@faa.gov>
Cc: Duke, Rick EOP/CEQ **Ex. 6 - Personal Privacy** Vahlsing, Candace M.
EOP/WHO **Ex. 6 - Personal Privacy**
Subject: RE: Call with EU on ICAO

Will do. Thanks.

From: McCabe, Janet [mailto:McCabe.Janet@epa.gov]
Sent: Monday, January 25, 2016 4:55 PM
To: Welsh, Kevin <[REDACTED] Charmley, William
<charmley.william@epa.gov>; 'Lourdes.Maurice@faa.gov' <Lourdes.Maurice@faa.gov>
Cc: Duke, Rick <[REDACTED] Vahlsing, Candace
<[REDACTED]
Subject: RE: Call with EU on ICAO

Kevin. Please put Bill, Chris and me on the manifest for tomorrow's call. Thanks for getting it set up.

From: Welsh, Kevin <[REDACTED]
Sent: Monday, January 25, 2016 4:02 PM
To: McCabe, Janet <McCabe.Janet@epa.gov <mailto:McCabe.Janet@epa.gov> >;
Charmley, William <charmley.william@epa.gov <mailto:charmley.william@epa.gov> >;
'Lourdes.Maurice@faa.gov' <Lourdes.Maurice@faa.gov
<mailto:Lourdes.Maurice@faa.gov> >
Cc: Duke, Rick <[REDACTED] Vahlsing, Candace <[REDACTED]
Subject: Call with EU on ICAO

Dear Janet, Bill and Lourdes,

We are confirmed for a teleconference with the EU for tomorrow at 11am. I will draft a short proposed agenda and provide a manifest for participation on our side to send to the EU tonight.

Here is a notional agenda:

Note: The U.S. would like to focus our discussion on aircraft above 60 tons, but we're open to discussing all issues.

- * Overview of position on stringency and applicability for aircraft above 60 tons
 - o US - 5-10 mins
 - o EC - 5-10 mins
- * Discussion of options for flexibility and closer alignment of EU and US positions
- * Follow-up

Please let me know if you have any additional suggestions to the above.

For the manifest, please confirm who will participate from EPA and FAA (we would prefer to keep numbers down). Ex. 5 - Deliberative Process I will follow-up with the dial-in number.

Thanks,

Kevin

To: Welsh, Kevin W. EOP/NSC[Ex. 6 - Personal Privacy]; McCabe, Janet[McCabe.Janet@epa.gov]; Charmley, William[charmley.william@epa.gov]; 'Lourdes.Maurice@faa.gov'[Lourdes.Maurice@faa.gov]
Cc: Duke, Rick EOP/CEQ[Ex. 6 - Personal Privacy]
From: Vahlsing, Candace M. EOP/WHO
Sent: Mon 1/25/2016 11:09:35 PM
Subject: RE: Call with EU on ICAO
US Position-CO2 Standard dpc NSC.PPTX

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Sent: Monday, January 25, 2016 5:10 PM
To: 'McCabe, Janet' <McCabe.Janet@epa.gov>; Charmley, William <charmley.william@epa.gov>; 'Lourdes.Maurice@faa.gov' <Lourdes.Maurice@faa.gov>
Cc: Duke, Rick EOP/CEQ [Ex. 6 - Personal Privacy] Vahlsing, Candace M. EOP/WHO
[Ex. 6 - Personal Privacy]
Subject: RE: Call with EU on ICAO

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To: Welsh, Kevin [Ex. 6 - Personal Privacy]; Charmley, William <charmley.william@epa.gov>; 'Lourdes.Maurice@faa.gov' <Lourdes.Maurice@faa.gov>
Cc: Duke, Rick [Ex. 6 - Personal Privacy] Vahlsing, Candace
[Ex. 6 - Personal Privacy]
Subject: RE: Call with EU on ICAO

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Sent: Monday, January 25, 2016 4:02 PM
To: McCabe, Janet <McCabe.Janet@epa.gov <mailto:McCabe.Janet@epa.gov> >; Charmley, William <charmley.william@epa.gov <mailto:charmley.william@epa.gov> >; 'Lourdes.Maurice@faa.gov' <Lourdes.Maurice@faa.gov <mailto:Lourdes.Maurice@faa.gov> >
Cc: Duke, Rick [Ex. 6 - Personal Privacy] Vahlsing, Candace [Ex. 6 - Personal Privacy]
Subject: Call with EU on ICAO

Dear Janet, Bill and Lourdes,

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 - o US - 5-10 mins
 - o EC - 5-10 mins
- * Discussion of options for flexibility and closer alignment of EU and US positions
- * Follow-up

Please let me know if you have any additional suggestions to the above.

For the manifest, please confirm who will participate from EPA and FAA (we would prefer to keep numbers down). From the White House you will have Ex. 5 - Deliberative Process I will follow-up with the dial-in number.

Thanks,

Kevin

To: Samulski, Michael[samulski.michael@epa.gov]
Cc: Ralph.lovinelli@faa.gov[Ralph.lovinelli@faa.gov];
Lourdes.Maurice@faa.gov[Lourdes.Maurice@faa.gov]; Audette, Lucie[audette.lucie@epa.gov];
Charmley, William[charmley.william@epa.gov]; Manning, Bryan[manning.bryan@epa.gov]
From: curtis.holsclaw@faa.gov
Sent: Tue 2/24/2015 7:05:46 PM
Subject: RE: NGO ltr and new industry association letter
AX-15-000-4615 CBD draft 2 23 15+FAA.docx
AX-15-000-5135 Airlines for America draft 2 23 15+FAA.docx

Mike,
Attached versions include our edits. I don't believe that you will have any problem with these edits but let us know. We have addressed both letter responses from Lourdes but that still needs to be officially cleared from above. I will let you know.
Thanks,
Curtis

-----Original Message-----

From: Samulski, Michael [mailto:samulski.michael@epa.gov]
Sent: Monday, February 23, 2015 3:18 PM
To: Holsclaw, Curtis (FAA)
Cc: lovinelli, Ralph (FAA); Maurice, Lourdes (FAA); Audette, Lucie; Charmley, William; Manning, Bryan
Subject: RE: NGO ltr and new industry association letter

Curtis,

I'm attaching the two draft responses we have been working on. One of the responses is to the five environmental NGOs, and the other is to the five aircraft associations. For your convenience, I am also attaching the incoming letters.

Also, who at FAA do you plan to have sign the response letters?

Mike

Michael Samulski
U.S. Environmental Protection Agency
Office of Transportation and Air Quality Director, Large Marine and Aircraft Center
1 (734) 214-4532
samulski.michael@epa.gov

-----Original Message-----

From: curtis.holsclaw@faa.gov [mailto:curtis.holsclaw@faa.gov]
Sent: Monday, February 23, 2015 1:51 PM
To: Samulski, Michael; Charmley, William
Cc: Ralph.lovinelli@faa.gov; Lourdes.Maurice@faa.gov
Subject: RE: NGO ltr and new industry association letter

Bill and Mike,

We just wanted to check status on your drafting of the responses. Will you be able to send us the drafts responses today? Thank you.

-----Original Message-----

From: Samulski, Michael [mailto:samulski.michael@epa.gov]

Sent: Wednesday, February 18, 2015 9:24 AM
To: Holsclaw, Curtis (FAA)
Cc: Iovinelli, Ralph (FAA); Maurice, Lourdes (FAA); Charmley, William
Subject: RE: NGO ltr and new industry association letter

Curtis,

Bill is on leave this week, so I am responding.

We got sidetracked with the ANPR, but are going to start drafting responses today. We should be able to get these drafts to you early next week.

Thanks,

Mike

Michael Samulski
U.S. Environmental Protection Agency
Office of Transportation and Air Quality Director, Large Marine and Aircraft Center
1 (734) 214-4532
samulski.michael@epa.gov

-----Original Message-----

From: curtis.holsclaw@faa.gov [mailto:curtis.holsclaw@faa.gov]
Sent: Wednesday, February 18, 2015 7:22 AM
To: Lourdes.Maurice@faa.gov; Charmley, William
Cc: Samulski, Michael; Ralph.Iovinelli@faa.gov
Subject: NGO ltr and new industry association letter
Importance: High

Good morning, Bill

While Lourdes is on leave this week I wanted to check-in with you to determine the status on the drafting of the joint response to the NGO letter. And I wanted to see if you have received the attached incoming from the industry associations. It seems to us that this incoming from industry should also be answered with a joint response. Can you take a look at this and let us know as soon as possible since our due date is next week.

Thanks.

Curtis Holsclaw
Deputy Director, AEE-2
Office of Environment and Energy
Federal Aviation Administration
Office: (202) 267-3575
Mobile: (202) 640-8618

-----Original Message-----

From: Maurice, Lourdes (FAA)
Sent: Wednesday, February 11, 2015 3:03 PM
To: Charmley, William

Cc: Samulski, Michael; Iovinelli, Ralph (FAA); Holsclaw, Curtis (FAA)
Subject: Re: NGO ltr

Dear Bill. Just checking on this. When might we expect a draft? Best wishes, Lourdes

Sent from my iPad

> On Jan 29, 2015, at 12:58 PM, Charmley, William <charmley.william@epa.gov> wrote:
>
> Dear Lourdes,
>
> I checked with our legal folks, they have no issues with a joint letter. I personally think it makes sense. I asked Mike if his staff could start a draft. I still need to check with Chris and Janet, but I don't see any issues with joint.
>
>
> We have not gotten the letter yet as a control in our office, so we don't have a due date yet. Hopefully it didn't get assigned to a different group at epa, but we will track it down.
>
> Thanks
> Bill
>
>
> Sent from my BlackBerry 10 smartphone on the Verizon Wireless 4G LTE network.
> Original Message
> From: Lourdes.Maurice@faa.gov
> Sent: Thursday, January 29, 2015 12:51 PM
> To: Charmley, William
> Cc: Samulski, Michael; Ralph.Iovinelli@faa.gov;
> curtis.holsclaw@faa.gov
> Subject: RE: NGO ltr
>
>
> Dear Bill -- Just checking on whether you had some reaction from your management on a joint letter.
>
> I just got a tasking from my Administrator's office to draft a letter
> by 3 Feb. After I finished laughing I asked my assistants to get an
> extension till end of month. Will see how it goes
>
> Appreciate an update. We may also have Rich Swayze reach out to Janet
> if you think that will help. Let me know
>
> Cheers, Lourdes
>
> -----Original Message-----
> From: Charmley, William [mailto:charmley.william@epa.gov]
> Sent: Sunday, January 25, 2015 9:27 PM
> To: Maurice, Lourdes (FAA)
> Cc: Samulski, Michael; Iovinelli, Ralph (FAA); Holsclaw, Curtis (FAA)
> Subject: Re: NGO ltr
>
> Dear Lourdes,
>
>
> Thanks for your note below. I saw an article with a link to the letter, but I had not read it until today.
>

Ex. 5 - Deliberative Process

> I'll try to get back with you later this week.

>

> In the mean time I will ask my staff to start a draft that we can send
> to you this week.

>

>

> Thanks

>

> Bill

>

>

>

>

> Original Message

> From: Lourdes.Maurice@faa.gov

> Sent: Saturday, January 24, 2015 12:21 PM

> To: Charmley, William

> Cc: Samulski, Michael; Ralph.Ivinelli@faa.gov;

> curtis.holsclaw@faa.gov

> Subject: NGO ltr

>

> Hi Bill. Assume you've seen the NGO ltr to our Administrators on CO2 std.

Ex. 5 - Deliberative Process

Ex. 5 - Deliberative Process

What do you think? We have not gotten the formal
assignment to answer but if you think it is a good idea and your politicals want a joint answer - maybe we
should start working on it?

Ex. 5 - Deliberative Process

Ex. 5 - Deliberative Process

>

> Let me know your thoughts.

>

> Cheers. Lourde

>

> Sent from my iPhone

To: Candace_M_Vahlsing[Ex. 6 - Personal Privacy] McCabe, Janet[McCabe.Janet@epa.gov]; Hengst, Benjamin[Hengst.Benjamin@epa.gov]; Charmley, William[charmley.william@epa.gov]; LeFranc, Maurice[LeFranc.Maurice@epa.gov]; Rich.Swayze@faa.gov[Rich.Swayze@faa.gov]; carl.burleson@faa.gov[carl.burleson@faa.gov]; shoshana.lew@dot.gov[shoshana.lew@dot.gov]; Atkinson, Emily[Atkinson.Emily@epa.gov]; brandon.belford@dot.gov[brandon.belford@dot.gov]
Cc: Kevin_W_Welsh[Ex. 6 - Personal Privacy] Dan_G_Utech[Ex. 6 - Personal Privacy] PBodnar[Ex. 6 - Personal Privacy] Richard_Duke[Ex. 6 - Personal Privacy] Ali_A_Zaidi[Ex. 6 - Personal Privacy] Shara_Z_Mohtadi[Ex. 6 - Personal Privacy]
From: Lourdes.Maurice@faa.gov
Sent: Fri 10/23/2015 5:37:07 PM
Subject: RE: ICAO CO2 Standard Meeting - Agenda and NEW TIME
[CO2 Standard - Status of Members 2015-10-23.pdf](#)
[CAEP 10 WP XX US CO2 Stringency 23 October EPA + FAA.docx](#)

Dear Kevin and Candace

Here are more installments of our homework

The draft position paper prepared jointly by EPA and FAA (pls note the paper is very technical – apologies but this is what is expected at the meeting). And keep in mind we only have 4 pages (we are slightly over but can work with spacing to get us to four pages)

Appreciate if we can get any comments by Oct 30 so we can prepare a final draft and share with the group ahead of IGIA clearance.

Also attached the assessment of country positions, taking into account the 60 tonnes kink break.

Cheers Lourdes

From: Vahlsing, Candace

Ex. 6 - Personal Privacy

Sent: Sunday, October 18, 2015 10:00 PM

To: 'McCabe, Janet'; 'Hengst, Benjamin'; 'charmley.william@epa.gov'; 'lefranc.maurice@epa.gov'; Swayze, Rich (FAA); Burleson, Carl (FAA); Maurice, Lourdes (FAA); Lew, Shoshana (OST); 'Atkinson, Emily'; Belford, Brandon (OST)

Cc: Welsh, Kevin; Utech, Dan G.; Bodnar, Paul; Duke, Rick; Zaidi, Ali; Mohtadi, Shara

Subject: RE: ICAO CO2 Standard Meeting - Agenda and NEW TIME

Great meeting on Thursday. Attaching a Summary of Conclusions, which includes key next steps and a revised timeline based on our discussion.

Please let us know if you have any questions.

Many thanks!

Kevin and Candace

IPC ON Aircraft CO2 Standard

DATE: October 15, 2015

LOCATION: EEOB 208

TIME: 6:00-7:00pm

Ex. 5 - Deliberative Process

Ex. 5 - Deliberative Process

Ex. 5 - Deliberative Process

Ex. 5 - Deliberative Process

From: Welsh, Kevin

Sent: Wednesday, October 14, 2015 6:21 PM

To: 'McCabe, Janet'; 'Hengst, Benjamin'; 'charmley.william@epa.gov'; 'lefranc.maurice@epa.gov'; 'Rich.Swayze@faa.gov'; 'carl.burleson@faa.gov'; 'Lourdes.Maurice@faa.gov'; 'shoshana.lew@dot.gov'; 'Atkinson, Emily'; 'brandon.belford@dot.gov'

Cc: Utech, Dan G.; Bodnar, Paul; Duke, Rick; Vahlsing, Candace

Subject: RE: ICAO CO2 Standard Meeting - Agenda and NEW TIME

Ahead of tomorrow's meeting is an updated agenda to reflect input this morning, as well as a read-ahead from FAA and EPA on stringency and applicability recommendations.

Look forward to seeing you tomorrow.

Thanks,

Kevin

From: Welsh, Kevin

Sent: Tuesday, October 13, 2015 7:56 PM

To: 'McCabe, Janet' <McCabe.Janet@epa.gov>; 'Hengst, Benjamin'

<Hengst.Benjamin@epa.gov>; 'charmley.william@epa.gov' <charmley.william@epa.gov>;
'lefranc.maurice@epa.gov' <lefranc.maurice@epa.gov>; 'Rich.Swayze@faa.gov'
<Rich.Swayze@faa.gov>; 'carl.burleson@faa.gov' <carl.burleson@faa.gov>;
'Lourdes.Maurice@faa.gov' <Lourdes.Maurice@faa.gov>; 'shoshana.lew@dot.gov'
<shoshana.lew@dot.gov>; 'Atkinson, Emily' <Atkinson.Emily@epa.gov>
Cc: Utech, Dan G. [Ex. 6 - Personal Privacy]; Bodnar, Paul [Ex. 6 - Personal Privacy]
Duke, Rick [Ex. 6 - Personal Privacy]; Vahlsing, Candace
[Ex. 6 - Personal Privacy]
Subject: ICAO CO2 Standard Meeting - Agenda and NEW TIME

All,

Attached is the agenda for Thursday's aircraft CO2 discussion. Also please note that due to a conflict that has arisen here, WE WILL START AT 6PM (we will still plan to stop at 7pm).

Thanks,

Kevin

From: Welsh, Kevin
Sent: Friday, October 09, 2015 12:03 PM
To: 'McCabe, Janet' <McCabe.Janet@epa.gov>; 'Hengst, Benjamin'
<Hengst.Benjamin@epa.gov>; 'charmley.william@epa.gov' <charmley.william@epa.gov>;
'lefranc.maurice@epa.gov' <lefranc.maurice@epa.gov>; 'Rich.Swayze@faa.gov'
<Rich.Swayze@faa.gov>; 'carl.burleson@faa.gov' <carl.burleson@faa.gov>;
'Lourdes.Maurice@faa.gov' <Lourdes.Maurice@faa.gov>; 'shoshana.lew@dot.gov'
<shoshana.lew@dot.gov>; 'Atkinson, Emily' <Atkinson.Emily@epa.gov>
Cc: Utech, Dan G. [Ex. 6 - Personal Privacy]; Bodnar, Paul [Ex. 6 - Personal Privacy]
Duke, Rick [Ex. 6 - Personal Privacy]; Vahlsing, Candace
[Ex. 6 - Personal Privacy]
Subject: RE: NEW TIME: RE: ICAO CO2 Standard Meeting - Please Hold October 15 from
5:30-7pm

All,

Next Thursday's meeting will be in EFOR 208 at 5:30pm. Here is a link to register for the meeting

Ex. 6 - Personal Privacy

We will send a detailed agenda by COB Tuesday, but as noted below, the focus will be to go through the key decision points and come to a common position on as many as possible.

Also, since this is a late meeting, we will do our best to start right on time, so please leave enough time for security.

Thanks,

Kevin

From: Welsh, Kevin

Sent: Thursday, October 08, 2015 4:09 PM

To: 'McCabe, Janet' <McCabe.Janet@epa.gov>; 'Hengst, Benjamin' <Hengst.Benjamin@epa.gov>; 'charmley.william@epa.gov' <charmley.william@epa.gov>; 'lefranc.maurice@epa.gov' <lefranc.maurice@epa.gov>; 'Rich.Swayze@faa.gov' <Rich.Swayze@faa.gov>; 'carl.burleson@faa.gov' <carl.burleson@faa.gov>; 'Lourdes.Maurice@faa.gov' <Lourdes.Maurice@faa.gov>; 'shoshana.lew@dot.gov' <shoshana.lew@dot.gov>

Cc: Utech, Dan G. Ex. 6 - Personal Privacy; Bodnar, Paul Ex. 6 - Personal Privacy; Duke, Rick Ex. 6 - Personal Privacy; Vahlsing, Candace Ex. 6 - Personal Privacy

Subject: NEW TIME: RE: ICAO CO2 Standard Meeting - Please Hold October 15 from 5:30-7pm

All,

Due to several conflicts, we will now hold this meeting on October 15 from 5:30pm to 7pm. Apologies for the late time, but looks to be about the only time that will work in the next couple of weeks.

Thanks,

Kevin

From: Welsh, Kevin

Sent: Monday, October 05, 2015 8:01 PM

To: 'McCabe, Janet' <McCabe.Janet@epa.gov>; 'Hengst, Benjamin' <Hengst.Benjamin@epa.gov>; charmley.william@epa.gov; 'lefranc.maurice@epa.gov' <lefranc.maurice@epa.gov>; 'Rich.Swayze@faa.gov' <Rich.Swayze@faa.gov>; 'carl.burleson@faa.gov' <carl.burleson@faa.gov>; 'Lourdes.Maurice@faa.gov' <Lourdes.Maurice@faa.gov>; 'shoshana.lew@dot.gov' <shoshana.lew@dot.gov>

Cc: Utech, Dan G. [Ex. 6 - Personal Privacy]; Bodnar, Paul [Ex. 6 - Personal Privacy]; Duke, Rick [Ex. 6 - Personal Privacy]; Vahlsing, Candace [Ex. 6 - Personal Privacy]

Subject: ICAO CO2 Standard Meeting - Please Hold October 15 from 3:00-4:30pm

All,

NSC and DPC will hold an interagency meeting on the developing the US position for the ICAO CO2 standard next week. Please hold Thursday, October 15 from 3-4:30pm.

We'll provide additional details later this week, but the objective of the meeting is to develop US positions on each of the key decision points regarding the ICAO CO2 standard. [Ex. 5 - Deliberative Process]

Ex. 5 - Deliberative Process

Best regards,

Kevin

To: curtis.holsclaw@faa.gov[curtis.holsclaw@faa.gov]
Cc: Ralph.lovinelli@faa.gov[Ralph.lovinelli@faa.gov];
Lourdes.Maurice@faa.gov[Lourdes.Maurice@faa.gov]; Audette, Lucie[audette.lucie@epa.gov];
Charmley, William[charmley.william@epa.gov]; Manning, Bryan[manning.bryan@epa.gov]
From: Samulski, Michael
Sent: Mon 2/23/2015 8:17:35 PM
Subject: RE: NGO ltr and new industry association letter
Assns Letter to EPA-FAA re Aircraft CO2-2-6-15.pdf
Envr NGO Aircraft Letter 1-22-15.pdf
AX-15-000-5135 Airlines for America draft 2 23 15.docx
AX-15-000-4615 CBD draft 2 23 15.docx

Curtis,

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Also, who at FAA do you plan to have sign the response letters?

Mike

Michael Samulski
U.S. Environmental Protection Agency
Office of Transportation and Air Quality
Director, Large Marine and Aircraft Center
1 (734) 214-4532
samulski.michael@epa.gov

-----Original Message-----

From: curtis.holsclaw@faa.gov [mailto:curtis.holsclaw@faa.gov]
Sent: Monday, February 23, 2015 1:51 PM
To: Samulski, Michael; Charmley, William
Cc: Ralph.lovinelli@faa.gov; Lourdes.Maurice@faa.gov
Subject: RE: NGO ltr and new industry association letter

Bill and Mike,

We just wanted to check status on your drafting of the responses. Will you be able to send us the drafts responses today? Thank you.

-----Original Message-----

From: Samulski, Michael [mailto:samulski.michael@epa.gov]
Sent: Wednesday, February 18, 2015 9:24 AM
To: Holsclaw, Curtis (FAA)
Cc: lovinelli, Ralph (FAA); Maurice, Lourdes (FAA); Charmley, William
Subject: RE: NGO ltr and new industry association letter

Curtis,

Bill is on leave this week, so I am responding.

We got sidetracked with the ANPR, but are going to start drafting responses today. We should be able to get these drafts to you early next week.

Thanks,

Mike

Michael Samulski
U.S. Environmental Protection Agency
Office of Transportation and Air Quality Director, Large Marine and Aircraft Center
1 (734) 214-4532
samulski.michael@epa.gov

-----Original Message-----

From: curtis.holsclaw@faa.gov [mailto:curtis.holsclaw@faa.gov]
Sent: Wednesday, February 18, 2015 7:22 AM
To: Lourdes.Maurice@faa.gov; Charmley, William
Cc: Samulski, Michael; Ralph.Ivinelli@faa.gov
Subject: NGO ltr and new industry association letter
Importance: High

Good morning, Bill

While Lourdes is on leave this week I wanted to check-in with you to determine the status on the drafting of the joint response to the NGO letter. And I wanted to see if you have received the attached incoming from the industry associations. It seems to us that this incoming from industry should also be answered with a joint response. Can you take a look at this and let us know as soon as possible since our due date is next week.

Thanks.

Curtis Holsclaw
Deputy Director, AEE-2
Office of Environment and Energy
Federal Aviation Administration
Office: (202) 267-3575
Mobile: (202) 640-8618

-----Original Message-----

From: Maurice, Lourdes (FAA)
Sent: Wednesday, February 11, 2015 3:03 PM
To: Charmley, William
Cc: Samulski, Michael; Ivinelli, Ralph (FAA); Holsclaw, Curtis (FAA)
Subject: Re: NGO ltr

Dear Bill. Just checking on this. When might we expect a draft? Best wishes, Lourdes

Sent from my iPad

> On Jan 29, 2015, at 12:58 PM, Charmley, William <charmley.william@epa.gov> wrote:
>
> Dear Lourdes,
>

> I checked with our legal folks, they have no issues with a joint letter. I personally think it makes sense. I asked Mike if his staff could start a draft. I still need to check with Chris and Janet, but I don't see any issues with joint.

>

>

> We have not gotten the letter yet as a control in our office, so we don't have a due date yet. Hopefully it didn't get assigned to a different group at epa, but we will track it down.

>

> Thanks

> Bill

>

>

> Sent from my BlackBerry 10 smartphone on the Verizon Wireless 4G LTE network.

> Original Message

> From: Lourdes.Maurice@faa.gov

> Sent: Thursday, January 29, 2015 12:51 PM

> To: Charmley, William

> Cc: Samulski, Michael; Ralph.lovinelli@faa.gov;

> curtis.holsclaw@faa.gov

> Subject: RE: NGO ltr

>

>

> Dear Bill -- Just checking on whether you had some reaction from your management on a joint letter.

>

> I just got a tasking from my Administrator's office to draft a letter

> by 3 Feb. After I finished laughing I asked my assistants to get an

> extension till end of month. Will see how it goes

>

> Appreciate an update. We may also have Rich Swayze reach out to Janet

> if you think that will help. Let me know

>

> Cheers, Lourdes

>

> -----Original Message-----

> From: Charmley, William [mailto:charmley.william@epa.gov]

> Sent: Sunday, January 25, 2015 9:27 PM

> To: Maurice, Lourdes (FAA)

> Cc: Samulski, Michael; lovinelli, Ralph (FAA); Holsclaw, Curtis (FAA)

> Subject: Re: NGO ltr

>

> Dear Lourdes,

>

>

> Thanks for your note below. I saw an article with a link to the letter, but I had not read it until today.

>

>

>

>

>

>

>

>

>

>

>

>

> I'll try to get back with you later this week.

Ex. 5 - Deliberative Process

>
> In the mean time I will ask my staff to start a draft that we can send
> to you this week.

>
>
> Thanks

>
> Bill

>
>
>
>
>
> Original Message
> From: Lourdes.Maurice@faa.gov
> Sent: Saturday, January 24, 2015 12:21 PM
> To: Charmley, William
> Cc: Samulski, Michael; Ralph.Iovinelli@faa.gov;
> curtis.holsclaw@faa.gov
> Subject: NGO ltr
>

> Hi Bill. Assume you've seen the NGO ltr to our Administrators on CO2 std. **Ex. 5 - Deliberative Process**

Ex. 5 - Deliberative Process What do you think? We have not gotten the formal
assignment to answer but if you think it is a good idea and your politicals want a joint answer - maybe we
should start working on it? **Deliberative Process / Ex. 5**

Deliberative Process / Ex. 5

>
> Let me know your thoughts.
>
> Cheers. Lourde
>
> Sent from my iPhone

To: Lourdes.Maurice@faa.gov[Lourdes.Maurice@faa.gov]
Cc: Ralph.lovinelli@faa.gov[Ralph.lovinelli@faa.gov]; Manning, Bryan[manning.bryan@epa.gov]; Charmley, William[charmley.william@epa.gov]; Hengst, Benjamin[Hengst.Benjamin@epa.gov]
From: Samulski, Michael
Sent: Fri 10/23/2015 12:51:54 PM
Subject: RE: Draft U.S. Position Paper
CAEP 10 WP XX US CO2 Stringency_v2 23 October EPA.docx

Okay on 6.1 c).

Bill gave me 2 minor editorial comments this morning. The attached document accepts all the changes that Ralph made, then makes the following 2 edits:

Ex. 5 - Deliberative Process

Thanks,

Mike

Michael Samulski

U.S. Environmental Protection Agency

Office of Transportation and Air Quality

Director, Large Marine and Aircraft Center

1 (734) 214-4532

samulski.michael@epa.gov

From: Lourdes.Maurice@faa.gov [mailto:Lourdes.Maurice@faa.gov]
Sent: Friday, October 23, 2015 8:35 AM
To: Samulski, Michael
Cc: Ralph.Iovinelli@faa.gov; Manning, Bryan
Subject: Re: Draft U.S. Position Paper

Ex. 5 - Deliberative Process

Cheers. Lourdes

Sent from my iPad

On Oct 23, 2015, at 8:21 AM, Samulski, Michael <samulski.michael@epa.gov> wrote:

Lourdes,

Ex. 5 - Deliberative Process

Thanks,

Mike

Michael Samulski

U.S. Environmental Protection Agency

Office of Transportation and Air Quality

Director, Large Marine and Aircraft Center

1 (734) 214-4532

samulski.michael@epa.gov

From: Lourdes.Maurice@faa.gov [mailto:Lourdes.Maurice@faa.gov]

Sent: Thursday, October 22, 2015 3:45 PM

To: Samulski, Michael

Cc: Ralph.Iovinelli@faa.gov; Manning, Bryan

Subject: Re: Draft U.S. Position Paper

Ex. 5 - Deliberative Process

Sent from my iPad

On Oct 22, 2015, at 3:26 PM, Samulski, Michael <samulski.michael@epa.gov> wrote:

Lourdes and Ralph,

Thank you for efforts in pulling together the first draft of the US position paper.

Attached are EPA staff comments in track changes. Where we thought it useful, we added comment bubbles to explain our thinking.

Ex. 5 - Deliberative Process

Bill has not reviewed this, but plans to look at the paper tomorrow. He recommended that we get the staff level comments to you today, though, so as to not hold up the process.

Mike

Michael Samulski

U.S. Environmental Protection Agency

Office of Transportation and Air Quality

Director, Large Marine and Aircraft Center

1 (734) 214-4532

samulski.michael@epa.gov

From: Ralph.Iovinelli@faa.gov [mailto:Ralph.Iovinelli@faa.gov]

Sent: Tuesday, October 20, 2015 8:53 PM

To: Samulski, Michael; Lourdes.Maurice@faa.gov

Subject: Draft U.S. Position Paper

Lourdes and Mike,

Attached for your review and comment is the U.S. position paper for the CO2 standard. It is a bit over the 4-page limit, but has all of the elements that we agreed to... As we are all painfully aware, this is due to the White House on Friday. Please provide your comments back at your earliest convenience.

Thanks,

Ralph

<CAEP 10 WP XX US CO2 Stringency_v2 20 October+EPA.docx>

To: Ralph.lovinelli@faa.gov[Ralph.lovinelli@faa.gov]; Samulski, Michael[samulski.michael@epa.gov]; Charmley, William[charmley.william@epa.gov]
From: Lourdes.Maurice@faa.gov
Sent: Fri 12/18/2015 11:27:34 PM
Subject: Fwd: WMF/NAA/Chaperones Group - Potential Release of CAEP Information for Use in Regulatory Impact Assessments - Update - a U.S. coordination problem
[Information to support rulemaking of ICAO Member States Draftv4 clean+CL.docx ATT00001.htm](#)

Folks. As you know we have been in Zurich and Ralph can attest I have been at mtgs from 7:30 AM to midnight. And Ralph has been right there as well. We had no time to work this.

Ex. 5 - Deliberative Process

Many thanks for sorting this out.

Lourdes

Sent from my iPhone

Begin forwarded message:

From: "Leggett, Cullen" <Leggett.Cullen@epa.gov>
To: "Chris Eysers" <chris@limitedskies.com>, "Locke, Maryalice (FAA)" <maryalice.locke@faa.gov>, "laurence.gray@pw.utc.com" <laurence.gray@pw.utc.com>, "Eric.Upton@gulfstream.com" <Eric.Upton@gulfstream.com>, "daniel.m.allyn@boeing.com" <daniel.m.allyn@boeing.com>, "darren.rhodes@caa.co.uk" <darren.rhodes@caa.co.uk>, "dmjensen@fedex.com" <dmjensen@fedex.com>, "olivier.husse@airbus.com" <olivier.husse@airbus.com>, "Balasubramanian, Sathya CTR (VOLPE)" <S.Balasubramania.CTR@dot.gov>, "TThrasher@icao.int" <TThrasher@icao.int>, "Maurice, Lourdes (FAA)" <Lourdes.Maurice@faa.gov>, "Michael.Lunter@minienm.nl" <Michael.Lunter@minienm.nl>, "gilles.bourgeois@tc.gc.ca" <gilles.bourgeois@tc.gc.ca>, "michael.clark@dft.gsi.gov.uk" <michael.clark@dft.gsi.gov.uk>, "jonathan.gilad@aviation-civile.gouv.fr" <jonathan.gilad@aviation-civile.gouv.fr>, "Stephen.Arrowsmith@easa.europa.eu" <Stephen.Arrowsmith@easa.europa.eu>, "Iovinelli, Ralph (FAA)" <Ralph.Iovinelli@faa.gov>, "wendy.bailey@tc.gc.ca" <wendy.bailey@tc.gc.ca>, "alexandre.filizola@anac.gov.br" <alexandre.filizola@anac.gov.br>, "matsukawa-

h2fg@mlit.go.jp" <matsukawa-h2fg@mlit.go.jp>, "mirzoyan@ciam.ru"
<mirzoyan@ciam.ru>, "xiaojunyoung@hotmail.com" <xiaojunyoung@hotmail.com>,
"ricardo.Dupont@anac.gov.br" <ricardo.Dupont@anac.gov.br>, "Iovinelli, Ralph (FAA)"
<Ralph.Iovinelli@faa.gov>, "Roger.Worth@dft.gsi.gov.uk"
<Roger.Worth@dft.gsi.gov.uk>, "kevin.guittet@aviation-civile.gouv.fr"
<kevin.guittet@aviation-civile.gouv.fr>, "Fleming, Gregg G (VOLPE)"
<Gregg.Fleming@dot.gov>, "urs.ziegler@bazl.admin.ch" <urs.ziegler@bazl.admin.ch>,
"willem.franken@easa.europa.eu" <willem.franken@easa.europa.eu>,
"willem.franken.easa@gmail.com" <willem.franken.easa@gmail.com>, "Cointin, Rebecca
(FAA)" <Rebecca.Cointin@faa.gov>, "stephen.arrowsmith@easa.europa.eu"
<stephen.arrowsmith@easa.europa.eu>, "Windhoffer, Laszlo (FAA)"
<Laszlo.Windhoffer@faa.gov>, "NDickson@icao.int" <NDickson@icao.int>
**Subject: RE: WMF/NAA/Chaperones Group - Potential Release of CAEP Information
for Use in Regulatory Impact Assessments - Update**

Chris,

Thank you for putting this together. This looks like a very good start.

Ex. 5 - Deliberative Process

Let me know if you, or anyone else, have any questions or would like to discuss anything.

Happy holidays!
Cullen

From: Chris Eyers [<mailto:chris@limitedskies.com>]
Sent: Monday, December 14, 2015 6:08 AM
To: maryalice.locke@faa.gov; laurence.gray@pw.utc.com; Eric.Upton@gulfstream.com;

daniel.m.allyn@boeing.com; darren.rhodes@caa.co.uk; dmjensen@fedex.com;
olivier.husse@airbus.com; S.Balasubramania.CTR@dot.gov; TThrasher@icao.int;
Lourdes.Maurice@faa.gov; Michael.Lunter@minienm.nl; gilles.bourgeois@tc.gc.ca;
michael.clark@dft.gsi.gov.uk; jonathan.gilad@aviation-civile.gouv.fr;
Stephen.Arrowsmith@easa.europa.eu; Ralph.Iovinelli@faa.gov; wendy.bailey@tc.gc.ca;
alexandre.filizola@anac.gov.br; matsukawa-h2fg@mlit.go.jp; mirzoyan@ciam.ru;
xiaojunyoung@hotmail.com; ricardo.Dupont@anac.gov.br; Ralph.Iovinelli@faa.gov;
Roger.Worth@dft.gsi.gov.uk; kevin.guittet@aviation-civile.gouv.fr;
Gregg.Fleming@dot.gov; urs.ziegler@bazl.admin.ch; willem.franken@easa.europa.eu;
willem.franken.easa@gmail.com; Rebecca.Cointin@faa.gov;
stephen.arrowsmith@easa.europa.eu; Laszlo.Windhoffer@faa.gov; NDickson@icao.int;
[Leggett, Cullen <Leggett.Cullen@epa.gov>](mailto:Leggett.Cullen@epa.gov)

Subject: RE: WMF/NAA/Chaperones Group - Potential Release of CAEP Information for
Use in Regulatory Impact Assessments - Update

Importance: High

Dear WMF Colleagues, NAA Representatives, CO2 Chaperons,

Ex. 5 - Deliberative Process

Best Regards

Niel Dickson
ICAO Secretariat

Chris Eyers
WMF Focal

From: Chris Eyers

Sent: 29 November 2015 19:53

To: 'maryalice.locke@faa.gov'; 'laurence.gray@pw.utc.com'; 'Eric.Upton@gulfstream.com';

'daniel.m.allyn@boeing.com'; 'darren.rhodes@caa.co.uk'; 'dmjensen@fedex.com';
'olivier.husse@airbus.com'; 'S.Balasubramania.CTR@dot.gov'; 'TThrasher@icao.int';
'Lourdes.Maurice@faa.gov'; 'Michael.Lunter@minienm.nl'; 'gilles.bourgeois@tc.gc.ca';
'michael.clark@dft.gsi.gov.uk'; 'jonathan.gilad@aviation-civile.gouv.fr';
'Stephen.Arrowsmith@easa.europa.eu'; 'Ralph.Iovinelli@faa.gov'; 'wendy.bailey@tc.gc.ca';
'alexandre.filizola@anac.gov.br'; 'matsukawa-h2fg@mlit.go.jp'; 'mirzoyan@ciam.ru';
'xiaojunyoung@hotmail.com'; 'ricardo.Dupont@anac.gov.br'; 'Ralph.Iovinelli@faa.gov';
'Roger.Worth@dft.gsi.gov.uk'; 'kevin.guittet@aviation-civile.gouv.fr';
'Gregg.Fleming@dot.gov'; 'urs.ziegler@bazl.admin.ch'; 'willem.franken@easa.europa.eu';
'willem.franken.easa@gmail.com'; 'Rebecca.Cointin@faa.gov';
'stephen.arrowsmith@easa.europa.eu'; 'Laszlo.Windhoffer@faa.gov'; 'NDickson@icao.int';
'Leggett, Cullen'

Subject: WMF/NAA/Chaperones Group - Potential Release of CAEP Information for Use
in Regulatory Impact Assessments - Update

Dear WMF Colleagues, NAA Representative, CO2 Chaperons,

Ex. 5 - Deliberative Process

I believe this plan is fully in line with our discussions.

Ex. 5 - Deliberative Process

Material preparation is planned to start next week.....

Best regards

Chris
WMF Focal

To: Chad_S_Whiteman(Ex. 6 - Personal Privacy)
Laszlo.Windhoffer@faa.gov[Laszlo.Windhoffer@faa.gov];
maryalice.locke@faa.gov[maryalice.locke@faa.gov]; James.Hileman@faa.gov[James.Hileman@faa.gov];
Lourdes.Maurice@faa.gov[Lourdes.Maurice@faa.gov];
curtis.holsclaw@faa.gov[curtis.holsclaw@faa.gov]; jlaity(Ex. 6 - Personal Privacy)
rrutledge(Ex. 6 - Personal Privacy) Griffiths, Charles[Griffiths.Charles@epa.gov]; Kopits,
Elizabeth[Kopits.Elizabeth@epa.gov]; Arthur.Rypinski@dot.gov[Arthur.Rypinski@dot.gov];
pwolfe@mit.edu[pwolfe@mit.edu]; morrisab@mit.edu[morrisab@mit.edu];
byutko@mit.edu[byutko@mit.edu]; athomas(Ex. 6 - Personal Privacy)
anne.bechdolt@dot.gov[anne.bechdolt@dot.gov]; Samulski, Michael[samulski.michael@epa.gov];
Charmley, William[charmley.william@epa.gov]; Manning, Bryan[manning.bryan@epa.gov];
Candace_M_Vahlsing(Ex. 6 - Personal Privacy)
Richard_Duke(Ex. 6 - Personal Privacy)
From: Ralph.Iovinelli@faa.gov
Sent: Fri 2/19/2016 6:54:15 PM
Subject: Domestic implementation of the Int'l Aircraft CO2 Emissions Standard
[OMB Regulatory Planning and Analysis - 2 18 2016.pdf](#)
[OIRA CO2 CBA MIT Main 2016 2 18 v1.pdf](#)
[OIRA CAEP10 CO2 Main Analysis 2016-02-17 v3.pdf](#)
[CAEP.10.IP.023.5 United States-Only CBA Of The Intern ICAO CO2 Standard Stringency Options \(SOs\).pdf](#)
[CAEP.10.IP.024.5 Global CBA Of The ICAO CO2 Standard Stringency Options \(SOs\).pdf](#)

Dear All,

Thank you for a productive meeting yesterday. Attached please find the meeting presentations and the ICAO/CAEP information papers.

Ex. 5 - Deliberative Process

Points of contact for these efforts are :

EPA – Mike Samulski 734-214-4832

FAA – Ralph Iovinelli 202-267-3566

Best Regards,

Ralph Iovinelli

Manager, Emissions Division (AEE-300)

Office of Environment and Energy

Federal Aviation Administration

800 Independence Ave., SW

Washington, DC 20591

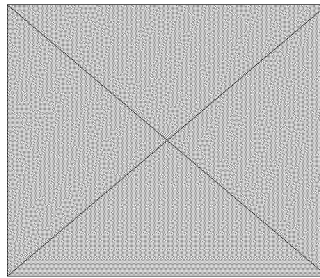
+1-202-267-3566 office

+1-202-288-6372 mobile

ralph.iovinelli@faa.gov

To: Charmley, William[charmley.william@epa.gov]; Samulski, Michael[samulski.michael@epa.gov]; Maurice, Lourdes[lourdes.maurice@faa.gov]; Burleson, Carl[carl.burleson@faa.gov]; Ralph.lovinelli@faa.gov[Ralph.lovinelli@faa.gov]; Welsh, Kevin[**Ex. 6 - Personal Privacy**]
From: Young, Nancy
Sent: Wed 6/10/2015 6:35:04 PM
Subject: Here is A4A's release
removed.txt

Link: <http://airlines.org/news/a4a-supports-ongoing-work-on-international-aircraft-emissions-standard/>



Airlines for America Supports Ongoing Work on International Aircraft Emissions Standard

WASHINGTON, June 10, 2015 – Airlines for America (A4A), the industry trade organization for the leading U.S. airlines, today issued the following statement in response to the Environmental Protection Agency's (EPA) announced finding, as required under the Clean Air Act and Advance Notice of Proposed Rulemaking on aircraft greenhouse gas (GHG) emissions.

U.S. airlines drive 5 percent of U.S. economic activity but account for only 2 percent of the nation's GHG emissions. A4A and our members support the work at the International Civil Aviation Organization (ICAO) to develop a carbon dioxide (CO₂) certification standard for new type aircraft, as it will further support our global aviation coalition's emissions goals to achieve 1.5% annual average fuel efficiency improvements through 2020 and carbon neutral growth from 2020, subject to critical aviation infrastructure and technology advances achieved by government and the industry. Before EPA may adopt the future international standard into U.S. law, the Clean Air Act requires the Agency to have made the proposed finding that aircraft GHG emissions "cause or contribute" to the climate change effects generally posed by GHG emissions. EPA made that general finding in 2009 and has been conducting the Clean Air Act-required assessments on a sector-by-sector basis in the years since.

“Aviation is a global industry, making it critical that aircraft emissions standards continue to be agreed upon at the international level,” said A4A Vice President, Environmental Affairs [Nancy Young](#). “While we believe that any regulatory action must be consistent with both the agency’s authority under the Clean Air Act and the future ICAO standard, today’s action reconfirms the EPA’s commitment to the ICAO process for achieving a global CO₂ standard for new aircraft.”

Young noted the U.S. aviation industry’s exceptional environmental track record, having improved fuel efficiency over 120 percent since 1978, and saving over 3.8 billion metric tons of CO₂, the equivalent to taking 23 million cars off the road each of those years. Further, the U.S. airlines carried 20 percent more passengers and cargo in 2014 than they did in 2000, while emitting 8 percent less CO₂.

“U.S. airlines are green and we are getting even greener,” said Young. “The technology, operations and infrastructure initiatives that our airlines are undertaking to further address GHG emissions are designed to responsibly and effectively limit their carbon emissions and potential climate change impacts while allowing them to continue to serve as drivers of U.S. and global economies.”

The ICAO work on an aircraft CO₂ certification standard for new aircraft commenced in 2010 under the Committee on Aviation Environmental Protection. EPA and the U.S. Federal Aviation Administration are key participants in this work, which is expected to culminate in February 2016 with a recommended international aircraft standard.

ABOUT A4A

Annually, commercial aviation helps drive nearly \$1.5 trillion in U.S. economic activity and more than 11 million U.S. jobs. Airlines for America (A4A) vigorously advocates on behalf of the American airline industry as a model of safety, customer service and environmental responsibility and as the indispensable network that drives our nation’s economy and global competitiveness. Our member carriers and their affiliates transport more than 90 percent of all U.S. airline passenger and cargo traffic.

America needs a cohesive National Airline Policy that will support the integral role the nation’s airlines play in connecting people and goods globally, spur the nation’s economic growth and create more high-paying jobs. A4A works collaboratively with the airlines, labor groups, Congress and the Administration to improve air travel for everyone.

For more information about the airline industry, visit our website airlines.org and our blog, A Better Flight Plan, at airlines.org/blog.
Follow us on Twitter: [@airlinesdotorg](https://twitter.com/airlinesdotorg).

Nancy N. Young

Vice President, Environmental Affairs

Airlines for America

We Connect the World

1301 Pennsylvania Ave, NW, Suite 1100

Washington, DC 20004

Phone: (202) 626-4207

email: nyoung@airlines.org

To: Kevin_W_Welsh([REDACTED] Ex. 6 - Personal Privacy); Atkinson, Emily[Atkinson.Emily@epa.gov]; Grundler, Christopher[grundler.christopher@epa.gov]; Hengst, Benjamin[Hengst.Benjamin@epa.gov]; Charmley, William[charmley.william@epa.gov]; Samulski, Michael[samulski.michael@epa.gov]; carl.burleson@faa.gov[carl.burleson@faa.gov]; Ralph.lovinelli@faa.gov[Ralph.lovinelli@faa.gov]; Manning, Bryan[manning.bryan@epa.gov]; curtis.holsclaw@faa.gov[curtis.holsclaw@faa.gov]
Cc: Richard Duke([REDACTED] Ex. 6 - Personal Privacy); PBodnar([REDACTED] Ex. 6 - Personal Privacy); Dan_G_Utech([REDACTED] Ex. 6 - Personal Privacy); Candace_M_Vahlsing([REDACTED] Ex. 6 - Personal Privacy)
From: Lourdes.Maurice@faa.gov
Sent: Fri 7/10/2015 4:30:13 PM
Subject: RE: Aviation - CO2 Standard Briefing - July 14 @3pm
[FAA-EPA CO2 Standard briefing 10 July 2015 final.docx](#)
[FAA-EPA CO2 Standard briefing 10 July 2015 final.pdf](#)

Dear Kevin – on behalf of EPA and FAA, please find attached word and pdf versions of our briefing paper. Look forward to the discussions next week.

Cheers, Lourdes

From: Welsh, Kevin ([REDACTED] Ex. 6 - Personal Privacy)
Sent: Thursday, July 09, 2015 5:05 PM
To: 'Atkinson.Emily@epa.gov'; 'grundler.christopher@epa.gov'; 'Hengst.Benjamin@epa.gov'; 'charmley.william@epa.gov'; 'samulski.michael@epa.gov'; Maurice, Lourdes (FAA); Burleson, Carl (FAA); lovinelli, Ralph (FAA)
Cc: Duke, Rick; Bodnar, Paul; Utech, Dan G.; Vahlsing, Candace
Subject: FW: Aviation - CO2 Standard Briefing - July 14 @3pm

Dear EPA and FAA colleagues,

I would like to confirm that you'll be able to provide a written briefing/presentation for next Tuesday's aviation CO2 meeting ahead of time, preferably by tomorrow COB to give the team here the opportunity to review and be prepped, especially given that we're not tracking this detailed subject matter closely.

Please let me know if there is an issue providing tomorrow, and if so, when you anticipate sharing something.

Thanks,

Kevin

From: Welsh, Kevin

Sent: Wednesday, June 24, 2015 3:31 PM

To: McCabe, Janet; Atkinson, Emily; 'Hengst, Benjamin'; 'lefranc.maurice@epa.gov'; 'rich.swayze@faa.gov'; carl.burleson@faa.gov; 'Lourdes.Maurice@faa.gov'; teresa.bryant@faa.gov; 'Walklet-Tighe, Megan'; 'dunlapem@state.gov'; Stern, Todd D (S/SECC); Carnahan, Kimberly C; LaCrosse, Carrie; Sierawski, Clare S; shoshana.lew@dot.gov; brandon.belford@dot.gov

Cc: Duke, Rick; Hansel, Peter; Haubrich, Edward

Subject: Aviation - CO2 Standard Briefing - July 14 @3pm

All,

We are hosting a meeting on July 14 from 3:00pm to 4:20pm in EEOB 445 for an update from EPA and FAA on the status, timing and objectives for adopting the aircraft CO2 standard in ICAO and the related EPA ANPRM. A more detailed agenda and briefing will be circulated in advance of the meeting.

To RSVP and register for the meeting, please provide your information at the following link:

Ex. 6 - Personal Privacy

Please let me know if you have any questions.

Best,

Kevin Welsh

Director for Environment and Climate Change

National Security Council

Ex. 6 - Personal Privacy

Manifest:

WH:

Dan Utech (DPC)

Rick Duke (DPC)

Nate Hultman (CEQ)

Candace Vahlsing (DPC)

Paul Bodnar (NSC)

Kevin Welsh (NSC)

Ali Zaidi (OMB)

State

FAA

DOT

EPA

To: Candace_M_Vahlsing[Ex. 6 - Personal Privacy]
carl.burleson@faa.gov[carl.burleson@faa.gov]; Samulski, Michael[samulski.michael@epa.gov];
Charmley, William[charmley.william@epa.gov]
Cc: curtis.holsclaw@faa.gov[curtis.holsclaw@faa.gov];
Ralph.lovinelli@faa.gov[Ralph.lovinelli@faa.gov]; Lourdes.Maurice@faa.gov[Lourdes.Maurice@faa.gov];
Kevin_W_Welsh[Ex. 6 - Personal Privacy]
From: Donald.Scata@faa.gov
Sent: Tue 12/15/2015 1:02:25 AM
Subject: RE: OIRA Comments on USG Position Paper and CBA for ICAO Aviation GHG Policy

Hi Candace –

Could you please confirm whether OIRA's intent was to have the last portion of the edits italicized?

Thanks,

Don

Donald S. Scata Jr.
Office of Environment & Energy

Federal Aviation Administration
202.267.3281 (w)

Ex. 6 - Personal Privacy

From: Vahlsing, Candace[Ex. 6 - Personal Privacy]
Sent: Monday, December 14, 2015 7:33 PM
To: Burleson, Carl (FAA); 'Samulski, Michael'; Charmley, William
Cc: Scata, Donald (FAA); Holsclaw, Curtis (FAA); lovinelli, Ralph (FAA); Maurice, Lourdes (FAA); Welsh, Kevin
Subject: RE: OIRA Comments on USG Position Paper and CBA for ICAO Aviation GHG Policy

Glad we got this all sorted out. ++ EPA

From: carl.burleson@faa.gov [<mailto:carl.burleson@faa.gov>]
Sent: Monday, December 14, 2015 7:20 PM
To: Vahlsing, Candace
Cc: Donald.Scata@faa.gov; curtis.holsclaw@faa.gov; Ralph.Iovinelli@faa.gov; Lourdes.Maurice@faa.gov; Welsh, Kevin
Subject: Re: OIRA Comments on USG Position Paper and CBA for ICAO Aviation GHG Policy

Thanks for the help Candace.

Sent from my iPhone

On Dec 14, 2015, at 6:13 PM, "Vahlsing, Candace" **Ex. 6 - Personal Privacy** wrote:

OIRA clears the version I sent earlier. They understand that it cannot be added to the WP.

Ex. 5 - Deliberative Process

From: Donald.Scata@faa.gov [<mailto:Donald.Scata@faa.gov>]
Sent: Monday, December 14, 2015 4:45 PM

To: Vahlsing, Candace

Cc: curtis.holsclaw@faa.gov; carl.burleson@faa.gov; Ralph.Iovinelli@faa.gov; Lourdes.Maurice@faa.gov; Welsh, Kevin

Subject: Re: OIRA Comments on USG Position Paper and CBA for ICAO Aviation GHG Policy

Hi Candace -

Have you had any luck?

Cheers,

Don

Sent from my iPhone

On Dec 14, 2015, at 3:43 PM, Vahlsing, Candace wrote: Ex. 6 - Personal Privacy

Thanks Don. Literally just pinged OIRA. This text is not cleared. Will let you know as soon as they reply.

From: Donald.Scata@faa.gov [<mailto:Donald.Scata@faa.gov>]

Sent: Monday, December 14, 2015 3:41 PM

To: Vahlsing, Candace; curtis.holsclaw@faa.gov; carl.burleson@faa.gov; Ralph.Iovinelli@faa.gov

Cc: Lourdes.Maurice@faa.gov; Welsh, Kevin

Subject: RE: OIRA Comments on USG Position Paper and CBA for ICAO Aviation GHG Policy

Hi Candace –

Sorry to bother you for another update- I need to finish this up. Is the updated text you sent below cleared by OIRA?

Thanks,

Don

Donald S. Scata Jr.
Office of Environment & Energy

Federal Aviation Administration
202.267.3281 (w)

Ex. 6 - Personal Privacy

From: Vahlsing, Candace Ex. 6 - Personal Privacy
Sent: Monday, December 14, 2015 2:52 PM
To: Scata, Donald (FAA); Holsclaw, Curtis (FAA); Burleson, Carl (FAA); Iovinelli, Ralph (FAA)
Cc: Maurice, Lourdes (FAA); Welsh, Kevin
Subject: RE: OIRA Comments on USG Position Paper and CBA for ICAO Aviation GHG Policy

Here is the most recent version, which just added the social cost of carbon and cut some unnecessary words that the end of the last sentence. BUT we do not have sign off yet. I'll let you know shortly.

Ex. 5 - Deliberative Process

Ex. 5 - Deliberative Process

From: Donald.Scata@faa.gov [mailto:Donald.Scata@faa.gov]
Sent: Monday, December 14, 2015 2:46 PM
To: curtis.holsclaw@faa.gov; Vahlsing, Candace; carl.burleson@faa.gov;
Ralph.Iovinelli@faa.gov
Cc: Lourdes.Maurice@faa.gov
Subject: RE: OIRA Comments on USG Position Paper and CBA for ICAO Aviation GHG Policy

Hi Candace –

Do you have an update following your discussion with OIRA? Curtis just called and left you a voicemail as well.

Thanks,

Don

Donald S. Scata Jr.
Office of Environment & Energy

Federal Aviation Administration
202.267.3281 (w)

Ex. 6 - Personal Privacy

From: Holsclaw, Curtis (FAA)
Sent: Monday, December 14, 2015 1:20 PM
To: Vahlsing, Candace; Burleson, Carl (FAA); Iovinelli, Ralph (FAA)
Cc: Maurice, Lourdes (FAA); Scata, Donald (FAA)
Subject: RE: OIRA Comments on USG Position Paper and CBA for ICAO Aviation GHG Policy

See below. The original para 1.4 was referring the “analysis presented in this information paper.” So I changed Working to Information.

From: Vahlsing, Candace **Ex. 6 - Personal Privacy**
Sent: Monday, December 14, 2015 1:06 PM
To: Holsclaw, Curtis (FAA); Burleson, Carl (FAA); Iovinelli, Ralph (FAA)
Cc: Maurice, Lourdes (FAA); Scata, Donald (FAA)
Subject: RE: OIRA Comments on USG Position Paper and CBA for ICAO Aviation GHG Policy

Not sure what you mean. Can you add your edit to the text in a different color?

From: curtis.holsclaw@faa.gov [<mailto:curtis.holsclaw@faa.gov>]
Sent: Monday, December 14, 2015 1:05 PM
To: Vahlsing, Candace; carl.burleson@faa.gov; Ralph.Iovinelli@faa.gov
Cc: Lourdes.Maurice@faa.gov; Donald.Scata@faa.gov
Subject: RE: OIRA Comments on USG Position Paper and CBA for ICAO Aviation GHG Policy

Candace, (looping in Don and Lourdes)

I believe it should be “...support of this Information Paper and will be”

From: Vahlsing, Candace

Ex. 6 - Personal Privacy

Sent: Monday, December 14, 2015 12:59 PM

To: Holsclaw, Curtis (FAA); Burleson, Carl (FAA); Iovinelli, Ralph (FAA)

Subject: RE: OIRA Comments on USG Position Paper and CBA for ICAO Aviation GHG Policy

Not final.

Ex. 5 - Deliberative Process

From: Lourdes.Maurice@faa.gov [mailto:Lourdes.Maurice@faa.gov]

Sent: Monday, December 14, 2015 12:48 PM

To: Vahlsing, Candace

Cc: curtis.holsclaw@faa.gov; Welsh, Kevin; samulski.michael@epa.gov; charmley.william@epa.gov; carl.burleson@faa.gov; Ralph.Iovinelli@faa.gov

Subject: Re: OIRA Comments on USG Position Paper and CBA for ICAO Aviation GHG Policy

Candace. I don't see any issues with modifying para 1.4. It is an IP and we are simply saying we may do other analyses domestically. But if you have issues pls modify. I just ask that we have papers to share by morning. Pm changing the WP it is a non issue as the deadline has passed so I am not worried about that.

Many thanks. Lourdes

Sent from my iPhone

On Dec 14, 2015, at 6:42 PM, Vahlsing, Candace

Ex. 6 - Personal Privacy wrote:

Thanks Lourdes. I hope to talk to OIRA shortly about the WP. On IP 23, do you mean that you are okay modifying the entire paragraph as proposed below, because we have a few concerns. Look forward to your call.

Ex. 6 - Personal Privacy

From: Lourdes.Maurice@faa.gov [mailto:Lourdes.Maurice@faa.gov]

Sent: Monday, December 14, 2015 12:40 PM

To: Vahlsing, Candace

Cc: curtis.holsclaw@faa.gov; Welsh, Kevin; samulski.michael@epa.gov; charmley.william@epa.gov; carl.burleson@faa.gov; Ralph.Iovinelli@faa.gov

Subject: Re: OIRA Comments on USG Position Paper and CBA for ICAO Aviation GHG Policy

Deliberative Process / Ex. 5

Many thanks in advance. Lourdes

Sent from my iPhone

On Dec 14, 2015, at 6:33 PM, Vahlsing, Candace

Ex. 6 - Personal Privacy wrote:

Curtis,

Can you give me a call at Ex. 6 - Personal Privacy please.

From: curtis.holsclaw@faa.gov [mailto:curtis.holsclaw@faa.gov]
Sent: Monday, December 14, 2015 12:13 PM
To: Vahlsing, Candace; Welsh, Kevin; samulski.michael@epa.gov; charmley.william@epa.gov
Cc: Lourdes.Maurice@faa.gov; carl.burleson@faa.gov; Ralph.Iovinelli@faa.gov
Subject: FW: OIRA Comments on USG Position Paper and CBA for ICAO Aviation GHG Policy

From: Bechdolt, Anne (OST)
Sent: Monday, December 14, 2015 11:47 AM
To: Burleson, Carl (FAA); Holsclaw, Curtis (FAA)
Subject: FW: OIRA Comments on USG Position Paper and CBA for ICAO Aviation GHG Policy

Hi Carl and Curtis,

This came in over the weekend and I wanted to talk to OIRA about what they want. The email below captures some of the issues they flagged with the analysis, but the bottom line is that they would like paragraph 1.4 in CAEP /10-IP/23 revised to state the following:

II To address these concerns, we recommend at a minimum that paragraph 1.4 from the USG CBA document (CAEP/10-IP/23) be edited as follows and that this paragraph also be included up front in the Working Paper (CAEP/10-WP/59):

Ex. 5 - Deliberative Process

Ex. 5 - Deliberative Process

Do you see issues with this?

Thanks

Anne

Anne,

Below are our comments on the USG Working Paper and Cost Benefit Analysis for the aviation GHG policy being considered by ICAO. The OIRA comments include both high level analytic concerns as well as a few suggested edits. I've attached the three documents that we were given to review.

Let me know if you would like to discuss.

Thanks,

Chad

Chad Whiteman

Policy Analyst | Office of Information and Regulatory Affairs

Office of Management and Budget | Executive Office of the President

Ex. 6 - Personal Privacy

High Level Analytic Concerns

CAEP/10-IP/23 – United States-Only Cost Benefit Analysis (CBA) of the International Civil Aviation Organization (ICAO) CO2 Standard Stringency Options (SOs)

Ex. 5 - Deliberative Process

Ex. 5 - Deliberative Process

Specific Suggestions

II Language Concerns and/or Clarifications Needed

Ex. 5 - Deliberative Process

Paper (CAEP/10-WP/59):

Ex. 5 - Deliberative Process

Message

From: Krieger, Jackie [Krieger.Jackie@epa.gov]
Sent: 6/11/2015 1:04:15 PM
To: Dunham, Sarah [Dunham.Sarah@epa.gov]
Subject: FW: Yesterday's Announcement of the Aircraft Endangerment Proposal

Just fyi Paul sent this nice note to staff, so I don't know that you need to (on top of Chris' note), but it would be good to say something to those folks next time you see them. Or maybe even stop by their offices to say something to them personally.

From: Gunning, Paul
Sent: Thursday, June 11, 2015 8:33 AM
To: OAR-OAP-CCD-ALL
Cc: Krieger, Jackie
Subject: Yesterday's Announcement of the Aircraft Endangerment Proposal

I just wanted to share the note that Chris Grundler sent out to OTAQ last night. When we had a press call yesterday announcing the aircraft endangerment proposal it was amazing to me that we did not get a single question on the proposed endangerment finding. It struck me as a pretty significant sign as to how far our work has helped advance public awareness of the science and the overall importance of the climate change problem.

Great job and congratulations to CSIB for all of your outstanding work!!!

Paul

From: Grundler, Christopher
Sent: Wednesday, June 10, 2015 6:04 PM
To: OAR-OTAQ
Cc: Dunham, Sarah; Gunning, Paul; Birnbaum, Rona; DeAngelo, Ben; Jantarasami, Lesley; McCabe, Janet; Millett, John; StClair, Christie; Purchia, Liz; Reynolds, Thomas
Subject: OTAQ In the News

Dear Colleagues

Today we reached an important milestone on our journey to address greenhouse gas emissions from aviation, a journey which began in a very cold Montreal, Canada (Matt Spears and I were there!) in 2010. Since that time, first under the leadership of Matt, and now with the leadership of Mike Samulski, we have been actively engaged in an international process that has established for the first time metrics and test procedures for CO2 from aircraft, and is now considering the stringency, timing, and applicability of standards. This process is happening at a specialized United Nations Agency, the International Civil Aviation Organization.

Aircraft account for 11% of U.S. transportation emissions, and 29% of global transport emissions, and are growing fast. Our Agency took the first step in establishing possible emissions standards for aircraft by announcing a [proposed endangerment finding under the Clean Air Act](#). If the Administrator makes a final determination next spring that emissions from aircraft endanger public health and welfare, EPA has a duty to establish emission standards for aircraft engines. Today we also issued an Advanced Notice of Proposed Rulemaking that describes the ongoing international standard-setting process, and seeks public input to the decisions that will be made over the coming year. Mike and his team will be working hard, alongside our colleagues at the FAA, to make sure ICAO adopts a meaningful standard, one that achieves emission reductions beyond business as usual.

The announcement today is also the culmination of tremendous teamwork between OTAQ and the Office of Atmospheric Programs, where the EPA experts on the complex science of climate change do their heroic work. Rona Birnbaum and her team led the work to update their historic 2009 Endangerment finding, the finding that set the course for the light and heavy duty greenhouse gas standards that we are busy implementing now.

I want to thank the OTAQ-OAP Aviation team for their hard work, patience, and persistence. Working in an international forum is time-consuming, frustrating, and painfully slow. This is the nature of environmental diplomacy. But the rewards are great for those that can endure, as the results have such far-reaching impacts. I am confident that Mike and our team will.

Below is a summary of stakeholder statements gathered so far, as well as coverage from the Washington Post. Many thanks to our outstanding communications team who once again put together a great roll-out despite the usual dynamic EPA environment.

-Chris

Industry/ Business

Airlines for America | Nancy Young, Vice President, Environmental Affairs

"While we believe that any regulatory action must be consistent with both the agency's authority under the Clean Air Act and the future ICAO standard, today's action reconfirms the EPA's commitment to the ICAO process for achieving a global CO2 standard for new aircraft." [Press release, 6/10/2015]

Environmental/Non-Profit Association

Environment America | Anna Aurilio, Director

"President Obama clearly views climate action as a priority, while polluters and their allies in Congress clearly view stopping climate action a priority. Since today's announcement will likely cause a fight in Congress, we hope the president makes this a fight worth having by requiring real cuts in airplane pollution. Bold action on climate should solve the problem of pollution from airplanes, not just acknowledge it." [Press Release, 6/10/2015]

Earth Justice | Sarah Burt, Attorney

"We commend EPA for completing this important first step in regulating carbon pollution from airplanes, but unfortunately, given the magnitude of aircraft's contribution to climate change, the tentative approach that EPA is considering is not up to the task. The EPA's Endangerment Finding confirms that aircraft are a significant source of climate pollution, emitting approximately 700 million metric tonnes per year. This makes global aviation, if it were equivalent to a country, the 7th largest global emitter, just below Germany and more than Korea and Canada. Instead of using its Clean Air Act authority to reduce these harmful emissions, EPA proposes to follow the lead of the International Civil Aviation Organization and set a 'business-as-usual' standard that will lock in emissions increases for decades to come. We strongly urge EPA to reconsider and to fulfill its Clean Air Act obligations by proposing a rule that accomplishes meaningful reductions in pollution from aircraft. The International Civil Aviation Organization's standard won't deliver substantial reductions because they are setting a standard that 90–95% of aircraft already meet. It won't apply it to existing aircraft, which have 20–30 year lifespan—only to new designs, which would push back the phase-in even more. The U.S. share of the problem is considerable, and a more robust U.S. action could help ratchet up the international standard." [Press Release, 6/10/2015]

Sierra Club | Joanne Spalding, Attorney

"President Obama is taking an important step on climate once again by finding that carbon pollution from airplanes poses the same danger to our climate as carbon pollution from other sources. This finding paves the way for action next year to create safeguards that will result in more efficient airplanes which pollute less while saving airlines and air travelers money on fuel costs. This commonsense finding comes in the context of the momentum building for

international negotiations to tackle the climate crisis this year in Paris. The United States will soon be in a position to effectively curb carbon pollution from its biggest sources, whether from cars, trucks, planes, or the electric sector.” [Press Release, 6/10/2015]

National Association of Clean Air Agencies | William Becker, Executive Director

“This is a prod to the industry, saying, your emissions are important enough from a health and welfare standpoint that they deserve to be controlled, but we are going to work with you, both domestically and internationally, to determine the extent to which they should be controlled,” said William Becker, executive director of the National Association of Clean Air Agencies. [Statement, 6/10/2015]

National Association of Clean Air Agencies | William Becker, Executive Director

“With today’s announcement, President Obama has a unique and extremely important opportunity to demonstrate leadership not only domestically but around the world.” [Statement, 6/10/2015]

Washington Post:

<http://www.washingtonpost.com/news/energy-environment/wp/2015/06/10/epa-moves-toward-limits-on-emissions-from-u-s-airlines/>

EPA moves toward limits on emissions from U.S. airlines

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Resize Text Print Article Comments 18
By Chris Mooney June 10 at 3:11 PM

The U.S. Environmental Protection Agency moved Wednesday to start the process of regulating greenhouse gas emissions from the nation’s fleet of commercial aircraft, a long-desired objective of environmental groups. But some fear the ultimate approach may prove too weak.

The agency released a proposed “endangerment finding,” meaning that it is suggesting that aircraft engines may “contribute to the air pollution that causes climate change and endangers public health and welfare.” That’s what the EPA has found for emissions from an even larger transportation-related contributor to global warming: cars.

The EPA also gave notice that it is considering regulations on aircraft engines. But rather than moving ahead on its own, the agency plans to continue to work on with the United Nations’ International Civil Aviation Organization (ICAO), which is expected to create its own global rules in early 2016. The EPA called Wednesday’s announcement “an initial step in the process for EPA to adopt CO2 standards promulgated by ICAO in the future.”

What has some environmental groups worried is this apparent deferral to an international body. “Passing the buck to an international organization that’s virtually run by the airline industry won’t protect our planet from these rapidly growing emissions,” Vera Pardee, attorney for the Center for Biological Diversity, said in a statement.

According to the EPA, commercial aircraft contribute 11 percent of emissions from the U.S. transportation sector, and overall, 3 percent of U.S. emissions. That may sound relatively small, and in comparison to cars or power plants, it definitely is.

But car emissions are already regulated, and power plant emissions would be soon under the proposed Clean Power Plan. If the airline industry grows substantially while remaining unregulated, its emissions as a percentage of the U.S. or global total will also grow.

Major growth in the domestic and global airline industry is indeed expected. The FAA projects that consumption of fuel will grow 49 percent in these aircraft from 2010 to 2035, with a corresponding increase in emissions.

“Aviation is a global industry, making it critical that aircraft emissions standards continue to be agreed upon at the international level,” Nancy Young, environmental affairs vice president for the U.S. airlines trade group Airlines for America, said in a statement Wednesday. “While we believe that any regulatory action must be consistent with both the agency’s authority under the Clean Air Act and the future ICAO standard, today’s action reconfirms the EPA’s commitment to the ICAO process for achieving a global CO2 standard for new aircraft.”

The EPA’s move was long in coming; environmental groups including the Center for Biological Diversity and Earthjustice petitioned for it in 2007, and then sued over it in 2010.

“This is a prod to the industry, saying, your emissions are important enough from a health and welfare standpoint that they deserve to be controlled, but we are going to work with you, both domestically and internationally, to determine the extent to which they should be controlled,” said William Becker, executive director of the National Association of Clean Air Agencies.

The proposed endangerment finding does not cover military planes or smaller planes, such as turboprops.

The key focus now will be on the ICAO process and whether it’s adequate. “Typically what ICAO does is a very weak standard,” adds Margo Oge, former director of the EPA’s Office of Transportation and Air Quality, and author of the book “Driving the Future: Combating Climate Change with Cleaner, Smarter Cars.” “Aircraft are the least-regulated source of transportation when it comes to emissions.”

But the EPA’s Christopher Grundler, head of the agency’s Office of Transportation and Air Quality, defended the international approach Wednesday, observing that “an international standard would cover far more aircraft than simply a domestic standard, and would cover far more greenhouse gas reduction.”

The precise concern about ICAO, said Oge, is that new regulations may only apply to new aircraft designs, rather than to all new aircraft. The former is a much narrower group than the latter. In its news release, the EPA asks for comment on which approach is effective: “whether the aircraft CO2 standard should apply to in-production aircraft...or whether the aircraft CO2 standard should apply only to completely new aircraft type designs.”

“The fear is that this will allow the continuation of older engines, because they can escape tougher requirements, and create a disincentive for any of these manufacturers to redesign their engines,” said the National Association of Clean Air Agencies’ Becker.

But the EPA did suggest that it could go further than the ICAO standards do. “Once an international standard is finalized by ICAO, member states are then required to adopt standards that are of at least equivalent stringency to those set by ICAO,” the agency noted.

There are also other intriguing ideas to reduce aircraft emissions that go beyond what anyone is proposing. One involves adding more automation for air traffic control, which could allow flights to take more fuel-efficient paths — something that NASA has been studying.

“Automation would mean more efficient routing, and particularly less time spent going up and down as you’re coming to land,” said Graham Spinardi, a social scientist at the University of Edinburgh who published a study on the idea — and why it has not caught on — last year in the journal Energy Research & Social Science.

To: Charmley, William[charmley.william@epa.gov]; Grundler, Christopher[grundler.christopher@epa.gov]; Dunham, Sarah[Dunham.Sarah@epa.gov]
Cc: Hengst, Benjamin[Hengst.Benjamin@epa.gov]; Samulski, Michael[samulski.michael@epa.gov]; Birnbaum, Rona[Birnbaum.Rona@epa.gov]
From: Gunning, Paul
Sent: Mon 4/11/2016 4:26:33 PM
Subject: RE: Intersection between aircraft CO2 standards and the ICAO MBM process: recent Administrator McCarthy comments

Bill, thanks for flagging this as we were not aware of the remarks. Looping in Rona too as we are beginning internal review of the preamble language.

Paul

From: Charmley, William
Sent: Monday, April 11, 2016 11:02 AM
To: Grundler, Christopher <grundler.christopher@epa.gov>; Dunham, Sarah <Dunham.Sarah@epa.gov>; Gunning, Paul <Gunning.Paul@epa.gov>
Cc: Hengst, Benjamin <Hengst.Benjamin@epa.gov>; Gunning, Paul <Gunning.Paul@epa.gov>; Samulski, Michael <samulski.michael@epa.gov>
Subject: Intersection between aircraft CO2 standards and the ICAO MBM process: recent Administrator McCarthy comments

Dear Chris, Sarah, and Paul

Last week my staff and I heard both from FAA and from some industry players regarding information they had read in the press from Administrator McCarthy on aircraft CO2 standards.

We did not know what this was referring to, and then we saw the attached from InsideEPA. In indicates that in the past week the Administrator discussed aircraft emissions at two different venues:

- An April 5 breakfast hosted by the Christian Science Monitor
- An April 7 “event in Ottawa, Canada”

The article has the title “**McCarthy Warns EPA Could Issue Stronger Aircraft GHG Rule If Global Talks Slip**”

This article includes the following:

After the ICAO council endorses the CO2 standard in June and the full assembly approves the measure, member countries must codify it into their domestic law.

EPA began that process last summer, issuing a proposed endangerment finding -- a legal prerequisite for a GHG regulation -- as well as an advanced notice of proposed rulemaking that took comment on suggestions that were debated in the ICAO negotiations. The agency intends to finalize its endangerment finding this summer.

That endangerment finding, McCarthy said during an April 7 event in Ottawa, Canada, can be used to help translate the ICAO standard into domestic law. But, “[i]f the ICAO process is not sufficient, it is an option to independently move forward,” the administrator added.

I am highlighting this for both of you because I want to make sure that in the Final Endangerment finding we do not say anything that is different from where the Administrator is at on the topic of the CO2 standard.

Ex. 5 - Deliberative Process

I expect that both FAA and others will have detailed comments on this text during interagency review. We are also considering sending these 16 pages to FAA in the next day or two, prior to the formal interagency review, as a courtesy.

Please let me know if you have any comments or questions on this topic.

Thanks

Bill

**<< language on EPA and ICAO CO2 standards and the to be developed EPA
NPRM for aircraft engine CO2 standards from the Draft Final Endangerment
Finding >>**

Ex. 5 - Deliberative Process

Ex. 5 - Deliberative Process

Message

From: Hengst, Benjamin [Hengst.Benjamin@epa.gov]
Sent: 6/27/2014 6:20:23 PM
To: OTAQ Materials [OTAQMaterials@epa.gov]
CC: Samulski, Michael [samulski.michael@epa.gov]; Audette, Lucie [audette.lucie@epa.gov]; Sargeant, Kathryn [sargeant.kathryn@epa.gov]
Subject: Early guidance briefing on Monday: aircraft endangerment/ANPRM
Attachments: Early Guidance_Aircraft for Janet McCabe 6 30 14.pptx

Chris –

Attached is the current draft of the briefing for Monday with Janet. I should have sent this to you last night but we were making edits over the past 24 hours based on further review of the slides.

This will be going to Janet later today. We can make further edits, however, if you have them and we can just send an updated version.

There is one slide dedicated to the ANPRM in this slide deck (along with a slide about EPA's authority and FAA's role in the appendix), as the team intentionally wanted this briefing to focus on the science and endangerment finding issues. If Janet and/or Joel want more detail on the ANPRM approach, we can offer to follow up later (it would be a lot to cover fully in one briefing anyway).

Thanks,
Ben

Appointment

From: Manning, Bryan [manning.bryan@epa.gov]
Sent: 11/15/2017 9:01:26 PM
To: Manning, Bryan [manning.bryan@epa.gov]; Yen, David [Yen.David@epa.gov]; Leggett, Cullen [Leggett.Cullen@epa.gov]; Mueller, John [mueller.john@epa.gov]; Samulski, Michael [samulski.michael@epa.gov]; Audette, Lucie [audette.lucie@epa.gov]; Maeroff, Bruce [Maeroff.Bruce@epa.gov]
Subject: Discuss Comment Bubbles in Preamble/RIA Outlines: aircraft CO2 NPRM
Attachments: Outline_Assignments_Preamble_Aircraft CO2 Stds NPRM 11-7-17.docx; Outline_Assignments_RIA_Aircraft CO2 Stds NPRM_11-15-17.docx
Location: AA-Room-Office-N125-ConfRoom/AA-OTAQ-OFFICE
Start: 11/21/2017 2:00:00 PM
End: 11/21/2017 3:30:00 PM
Show Time As: Busy

We may not need the full 1.5 hours for the meeting, but I reserved this amount of time just in case we run long.

Thanks,

Bryan

Appointment

From: Manning, Bryan [manning.bryan@epa.gov]
Sent: 8/31/2017 5:41:52 PM
To: Manning, Bryan [manning.bryan@epa.gov]; Audette, Lucie [audette.lucie@epa.gov]; Leggett, Cullen [Leggett.Cullen@epa.gov]; Samulski, Michael [samulski.michael@epa.gov]
Subject: Aircraft GHG Endangerment Q&A (Mike's office)
Attachments: Aircraft Endangerment Draft QA 8.29.docx
Start: 8/31/2017 7:30:00 PM
End: 8/31/2017 8:00:00 PM
Show Time As: Busy

Hi,

See the attached Q&A that Tia just sent us. I realize that we all may have Ex. 6 - Personal Privacy on our schedules today from 2:00-4:00. Yet, Mike asked if we could find a time to talk about this Q&A before he leaves today at 4:00 (also, he and I are off tomorrow). Hopefully, you can make this meeting. Or, at least maybe we can talk for 15 minutes (of this 30 minute meeting).

Thanks,

Bryan

Appointment

From: Manning, Bryan [manning.bryan@epa.gov]
Sent: 1/9/2015 6:53:28 PM
To: Manning, Bryan [manning.bryan@epa.gov]; Leggett, Cullen [Leggett.Cullen@epa.gov]; Yen, David [Yen.David@epa.gov]; Maeroff, Bruce [Maeroff.Bruce@epa.gov]
Subject: ERG GHG GA Jet fuel breakout work (latest spreadsheet & draft report); N125
Attachments: GHG Small Jet Inventory-12-22-2014_JF_jt.docx; T100 and GAATA Fuel Burn and CO2 Emissions_12-18-2014.xlsx
Location: AA-Room-Office-N125-ConfRoom/AA-OTAQ-OFFICE
Start: 1/12/2015 4:30:00 PM
End: 1/12/2015 5:00:00 PM
Show Time As: Busy



GHG Small Jet
Inventory-12-22-...



T100 and GAATA
Fuel Burn and C...

Message

From: Manning, Bryan [manning.bryan@epa.gov]
Sent: 11/13/2017 6:48:55 PM
To: Giannelli, Bob [Giannelli.Bob@epa.gov]; Leggett, Cullen [Leggett.Cullen@epa.gov]; Maeroff, Bruce [Maeroff.Bruce@epa.gov]; Mueller, John [mueller.john@epa.gov]; Samulski, Michael [samulski.michael@epa.gov]; Yen, David [Yen.David@epa.gov]; Audette, Lucie [audette.lucie@epa.gov]; Stevens, JeffreyA [Stevens.JeffreyA@epa.gov]; Wolfe, Philip [wolfe.philip@epa.gov]; Lindsey, Leah [lindsey.leah@epa.gov]
Subject: Agenda: Aviation Team Mtg (Nov 13) in C35 at 2:00
Attachments: Agenda team mtg 11-13-17.docx

Hello,

Attached please find the agenda for today's (Nov 13) aviation team meeting at 2:00 in C35. Let me know if you have anything to add.

Thank you,

Bryan

Bryan Manning
U.S. EPA Office of Transportation and Air Quality
Large Marine and Aviation Center
2000 Traverwood Drive
Ann Arbor, MI 48105
(ph) 734-214-4832 (fax) 734-214-4816
manning.bryan@epa.gov

Message

From: Manning, Bryan [manning.bryan@epa.gov]
Sent: 10/16/2017 5:56:35 PM
To: Giannelli, Bob [Giannelli.Bob@epa.gov]; Leggett, Cullen [Leggett.Cullen@epa.gov]; Maeroff, Bruce [Maeroff.Bruce@epa.gov]; Mueller, John [mueller.john@epa.gov]; Samulski, Michael [samulski.michael@epa.gov]; Yen, David [Yen.David@epa.gov]; Audette, Lucie [audette.lucie@epa.gov]; Stevens, JeffreyA [Stevens.JeffreyA@epa.gov]; Wolfe, Philip [wolfe.philip@epa.gov]; Lindsey, Leah [lindsey.leah@epa.gov]
Subject: Agenda: Aviation Team Mtg (Oct 16) in C35 at 2:00
Attachments: Agenda team mtg 10-16-17.docx

Hello,

Attached please find the agenda for today's (Oct 16) aviation team meeting at 2:00 in C35. Let me know if you have anything to add.

Thank you,

Bryan

Bryan Manning
U.S. EPA Office of Transportation and Air Quality
Large Marine and Aviation Center
2000 Traverwood Drive
Ann Arbor, MI 48105
(ph) 734-214-4832 (fax) 734-214-4816
manning.bryan@epa.gov

Message

From: Manning, Bryan [manning.bryan@epa.gov]
Sent: 10/10/2017 4:29:55 PM
To: Giannelli, Bob [Giannelli.Bob@epa.gov]; Leggett, Cullen [Leggett.Cullen@epa.gov]; Maeroff, Bruce [Maeroff.Bruce@epa.gov]; Mueller, John [mueller.john@epa.gov]; Samulski, Michael [samulski.michael@epa.gov]; Yen, David [Yen.David@epa.gov]; Audette, Lucie [audette.lucie@epa.gov]; Stevens, JeffreyA [Stevens.JeffreyA@epa.gov]; Wolfe, Philip [wolfe.philip@epa.gov]; Lindsey, Leah [lindsey.leah@epa.gov]
Subject: Agenda: Aviation Team Mtg (Oct 10) in C35 at 2:00
Attachments: Agenda team mtg 10-10-17.docx

Hello,

Attached please find the agenda for today's (Oct 10) aviation team meeting at 2:00 in C35. Let me know if you have anything to add.

Thank you,

Bryan

Bryan Manning
U.S. EPA Office of Transportation and Air Quality
Large Marine and Aviation Center
2000 Traverwood Drive
Ann Arbor, MI 48105
(ph) 734-214-4832 (fax) 734-214-4816
manning.bryan@epa.gov

Message

From: Manning, Bryan [manning.bryan@epa.gov]
Sent: 10/2/2017 5:56:01 PM
To: Giannelli, Bob [Giannelli.Bob@epa.gov]; Leggett, Cullen [Leggett.Cullen@epa.gov]; Maeroff, Bruce [Maeroff.Bruce@epa.gov]; Mueller, John [mueller.john@epa.gov]; Samulski, Michael [samulski.michael@epa.gov]; Yen, David [Yen.David@epa.gov]; Audette, Lucie [audette.lucie@epa.gov]; Stevens, JeffreyA [Stevens.JeffreyA@epa.gov]; Wolfe, Philip [wolfe.philip@epa.gov]; Lindsey, Leah [lindsey.leah@epa.gov]; Gerring, Holly [gerring.holly@epa.gov]
Subject: Agenda: Aviation Team Mtg (Oct 2) in C35 at 2:00
Attachments: Agenda team mtg 10-2-17.docx

Hello,

Attached please find the agenda for today's (Oct 2) aviation team meeting at 2:00 in C35. Let me know if you have anything to add.

Thank you,

Bryan

Bryan Manning
U.S. EPA Office of Transportation and Air Quality
Large Marine and Aviation Center
2000 Traverwood Drive
Ann Arbor, MI 48105
(ph) 734-214-4832 (fax) 734-214-4816
manning.bryan@epa.gov

Message

From: Manning, Bryan [manning.bryan@epa.gov]
Sent: 9/18/2017 2:49:47 PM
To: Giannelli, Bob [Giannelli.Bob@epa.gov]; Leggett, Cullen [Leggett.Cullen@epa.gov]; Maeroff, Bruce [Maeroff.Bruce@epa.gov]; Mueller, John [mueller.john@epa.gov]; Samulski, Michael [samulski.michael@epa.gov]; Yen, David [Yen.David@epa.gov]; Audette, Lucie [audette.lucie@epa.gov]; Stevens, JeffreyA [Stevens.JeffreyA@epa.gov]; Wolfe, Philip [wolfe.philip@epa.gov]; Lindsey, Leah [lindsey.leah@epa.gov]; Gerring, Holly [gerring.holly@epa.gov]
Subject: Agenda: Aviation Team Mtg (Sept 18) in C35 at 2:00
Attachments: Agenda team mtg 9-18-17.docx

Hello,

Attached please find the agenda for today's (Sept 18) aviation team meeting at 2:00 in C35. Let me know if you have anything to add.

Thank you,

Bryan

Bryan Manning
U.S. EPA Office of Transportation and Air Quality
Large Marine and Aviation Center
2000 Traverwood Drive
Ann Arbor, MI 48105
(ph) 734-214-4832 (fax) 734-214-4816
manning.bryan@epa.gov

Message

From: Manning, Bryan [manning.bryan@epa.gov]
Sent: 2/1/2016 8:32:07 PM
To: Audette, Lucie [audette.lucie@epa.gov]
CC: Leggett, Cullen [Leggett.Cullen@epa.gov]
Subject: FW: information from the Endangerment/ANPRM aircraft material
Attachments: FINAL Q&A aircraft GHG endang NPRM-ANPR.docx

Hello Lucie,

Attached please find the final Q&A from the NPRM/ANPR in June 2015. Thanks. Bryan

Bryan Manning
U.S. EPA Office of Transportation and Air Quality
Large Marine and Aviation Center
2000 Traverwood Drive
Ann Arbor, MI 48105
(ph) 734-214-4832 (fax) 734-214-4816
manning.bryan@epa.gov

From: Manning, Bryan
Sent: Wednesday, January 27, 2016 2:45 PM
To: Iffland, JoNell <Iffland.JoNell@epa.gov>; Charmley, William <charmley.william@epa.gov>
Cc: Samulski, Michael <samulski.michael@epa.gov>; Audette, Lucie <audette.lucie@epa.gov>
Subject: RE: information from the Endangerment/ANPRM aircraft material

Hello Bill and JoNell,

As you requested, attached please find the fact sheet and internal Q&A for last June's aircraft GHG endangerment NPRM/ANPR (for the briefing book needed on trip next week).

Thanks,

Bryan

P.S. I already sent these documents to JoNell in an earlier email, but I inadvertently did not send it to Bill. Thus, I am resending it.

Bryan Manning
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Large Marine and Aviation Center
2000 Traverwood Drive
Ann Arbor, MI 48105
(ph) 734-214-4832 (fax) 734-214-4816
manning.bryan@epa.gov

From: Charmley, William
Sent: Wednesday, January 27, 2016 12:59 PM
To: Manning, Bryan <manning.bryan@epa.gov>; Audette, Lucie <audette.lucie@epa.gov>
Cc: Samulski, Michael <samulski.michael@epa.gov>; Iffland, JoNell <Iffland.JoNell@epa.gov>
Subject: information from the Endangerment/ANPRM aircraft material

Bryan and Lucie –

Can one of you email to JoNell and I a copy of the Fact Sheet and the internal Q&A document that we used last year in June for the release of the proposed endangerment finding/ANPRM.

This is for a briefing book for Chris/Karl/me for a trip to Brussels next week (the trip is not focused at all on aircraft).

Thanks
Bill

Bill Charmley
Director
Assessment and Standards Division
Office of Transportation and Air Quality
U.S. Environmental Protection Agency

National Vehicle and Fuel Emissions Laboratory
2000 Traverwood Drive
Ann Arbor, MI 48105

desk ph. 734-214-4466
cell ph. 734-545-0333
e-mail: charmley.william@epa.gov

To: Manning, Bryan[manning.bryan@epa.gov]; Sun, Lisa[Sun.Lisa@epa.gov]
Cc: Jantarasami, Lesley[Jantarasami.Lesley@epa.gov]; Maeroff, Bruce[Maeroff.Bruce@epa.gov]; Audette, Lucie[audette.lucie@epa.gov]; Yen, David[Yen.David@epa.gov]; Birgfeld, Erin[Birgfeld.Erin@epa.gov]; Dietrich, Gwen[Dietrich.Gwen@epa.gov]; Page, Margaret[Page.Margaret@epa.gov]; Suarez, Patricia[suarez.patricia@epa.gov]; France, Jennifer[france.jennifer@epa.gov]
From: Levin, David
Sent: Thur 12/22/2016 5:58:21 PM
Subject: RE: Response to Reconsideration Petition FRN + cover letter (OTAQ aviation webpage): aircraft GHG finding FRM - READY to POST TO WEBSITE
[aircraft-endangerment-reconsideration-petition-response-2016-12-21.pdf](#)

Hi Bryan / Lisa

Attached is the PDF document **Aircraft Endangerment Reconsideration Petition Response** (2016-12-21). The document has been formatted for the Web and is 10 pages/ 285 KB. It is ready for posting.

Regarding the other document to be posted: **Petition to Reconsider Aircraft Endangerment Biogenic CO2 Coalition**

I just want to be on the same page with everyone; is it OK to post the version I formatted on Wednesday? As I understand it, the one that I created on Wednesday is the same version as the one that Lesley sent today. Is that correct?

Also, Lisa had a question. Are these documents going to be linked to the Federal Register?

Thanks for your help with this!

David

David Levin

Communications / Information Management Specialist

Senior Service America, Inc. (Grantee)

Supporting the Office of Transportation and Air Quality

Phone: 734-214-4353

From: Manning, Bryan

Sent: Thursday, December 22, 2016 12:45 PM

To: Sun, Lisa <Sun.Lisa@epa.gov>; Levin, David <Levin.David@epa.gov>; Dietrich, Gwen <Dietrich.Gwen@epa.gov>; Page, Margaret <Page.Margaret@epa.gov>; Suarez, Patricia <suarez.patricia@epa.gov>

Cc: Jantarasami, Lesley <Jantarasami.Lesley@epa.gov>; Maeroff, Bruce <Maeroff.Bruce@epa.gov>; Audette, Lucie <audette.lucie@epa.gov>; Yen, David <Yen.David@epa.gov>; Birgfeld, Erin <Birgfeld.Erin@epa.gov>

Subject: RE: Response to Reconsideration Petition FRN + cover letter (OTAQ aviation webpage): aircraft GHG finding FRM - READY to POST TO WEBSITE

Looks great, Lisa. Thank you. However, I noticed something different for the NEW paragraph. When I clicked on the "documents" link for this NEW paragraph, it does not actually go to the two documents (cover letter/response and original petition). You may have indicated this already, but are you all still working on posting the documents to this link?

Thanks again,

Bryan

Bryan Manning

U.S. EPA Office of Transportation and Air Quality

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(ph) 734-214-4832 (fax) 734-214-4816

manning.bryan@epa.gov

From: Sun, Lisa

Sent: Thursday, December 22, 2016 12:39 PM

To: Manning, Bryan <manning.bryan@epa.gov>; Levin, David <Levin.David@epa.gov>; Dietrich, Gwen <Dietrich.Gwen@epa.gov>; Page, Margaret <Page.Margaret@epa.gov>; Suarez, Patricia <suarez.patricia@epa.gov>

Cc: Jantarasami, Lesley <Jantarasami.Lesley@epa.gov>; Maeroff, Bruce <Maeroff.Bruce@epa.gov>; Audette, Lucie <audette.lucie@epa.gov>; Yen, David <Yen.David@epa.gov>

Subject: RE: Response to Reconsideration Petition FRN + cover letter (OTAQ aviation webpage): aircraft GHG finding FRM - READY to POST TO WEBSITE

Sure, it's updated.

Ex. 5 - Deliberative Process

thanks,

Lisa Sun

Web Coder (ASRC)

734-214-4599

~ Your Posting is Under Construction ~

<https://www.epa.gov/air-pollution-transportation>

<http://otaqintranet.epa.gov/> (OTAQ@Work)

From: Manning, Bryan

Sent: Thursday, December 22, 2016 12:33 PM

To: Sun, Lisa <Sun.Lisa@epa.gov>; Levin, David <Levin.David@epa.gov>; Dietrich, Gwen <Dietrich.Gwen@epa.gov>; Page, Margaret <Page.Margaret@epa.gov>; Suarez, Patricia <suarez.patricia@epa.gov>

Cc: Jantarasami, Lesley <Jantarasami.Lesley@epa.gov>; Maeroff, Bruce <Maeroff.Bruce@epa.gov>; Audette, Lucie <audette.lucie@epa.gov>; Yen, David <Yen.David@epa.gov>

Subject: RE: Response to Reconsideration Petition FRN + cover letter (OTAQ aviation webpage): aircraft GHG finding FRM - READY to POST TO WEBSITE

Thank you, Lisa. It looks great. I have only one minor comment. For the Regulations for Greenhouse Gas Emissions from Aircraft page, could we remove the blank line between the final Finding (the 2nd or old item under 2016) and its description as shown below? The NEW posting (EPA Responds...) paragraph is fine as is.

NEW EPA Responds to Petition to Reconsider Finding that Greenhouse Gas Emissions from Certain Classes of Aircraft Endanger Public Health and Welfare

The EPA responded to the petition for reconsideration of the final action, “Finding That Greenhouse Gas Emissions From Aircraft Cause or Contribute to Air Pollution That May Reasonably Be Anticipated To Endanger Public Health and Welfare.” The petition requested reconsideration of that finding with respect to the Agency’s treatment of biogenic carbon dioxide (CO₂) emissions from short-cycle annual herbaceous crops. In the EPA’s response, the Administrator denied the petition for reconsideration for the reasons set forth in the below documents.

EPA Finalizes Clean Air Act Finding that Greenhouse Gas Emissions from Certain Classes of Aircraft Endanger Human Health and Welfare

EPA finalized findings that GHG emissions from certain classes of engines used in aircraft contribute to the air pollution that causes climate change endangering public health and welfare under section 231(a) of the Clean Air Act. The EPA’s findings are in preparation for a future domestic rulemaking process to adopt future GHG standards. Any future proposed aircraft engine standards would also be open to public comment and review before they could take effect.

Thanks,

Bryan

Bryan Manning

U.S. EPA Office of Transportation and Air Quality

Large Marine and Aviation Center

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Ann Arbor, MI 48105

(ph) 734-214-4832 (fax) 734-214-4816

manning.bryan@epa.gov

From: Sun, Lisa

Sent: Thursday, December 22, 2016 12:19 PM

To: Manning, Bryan <manning.bryan@epa.gov>; Levin, David <Levin.David@epa.gov>; Dietrich, Gwen <Dietrich.Gwen@epa.gov>; Page, Margaret <Page.Margaret@epa.gov>; Suarez, Patricia <suarez.patricia@epa.gov>

Cc: Jantarasami, Lesley <Jantarasami.Lesley@epa.gov>; Macroff, Bruce <Macroff.Bruce@epa.gov>; Audette, Lucie <audette.lucie@epa.gov>; Yen, David <Yen.David@epa.gov>

Subject: RE: Response to Reconsideration Petition FRN + cover letter (OTAQ aviation webpage): aircraft GHG finding FRM - READY to POST TO WEBSITE

Bryan,

David is working on the document, I'll link it to page when it's ready, here are the staging pages,

Ex. 5 - Deliberative Process

thanks,

Lisa Sun

Web Coder (ASRC)

734-214-4599

~ Your Posting is Under Construction ~

<https://www.epa.gov/air-pollution-transportation>

<http://otaqintranet.epa.gov/> (OTAQ@Work)

From: Manning, Bryan

Sent: Thursday, December 22, 2016 12:07 PM

To: Levin, David <Levin.David@epa.gov>; Dietrich, Gwen <Dietrich.Gwen@epa.gov>; Page, Margaret <Page.Margaret@epa.gov>; Sun, Lisa <Sun.Lisa@epa.gov>; Suarez, Patricia <suarez.patricia@epa.gov>

Cc: Jantarasami, Lesley <Jantarasami.Lesley@epa.gov>; Maeroff, Bruce <Maeroff.Bruce@epa.gov>; Audette, Lucie <audette.lucie@epa.gov>; Yen, David <Yen.David@epa.gov>

Subject: FW: Response to Reconsideration Petition FRN + cover letter (OTAQ aviation webpage): aircraft GHG finding FRM - READY to POST TO WEBSITE

Hi,

See the below message. This is ready to be posted. See the two attachments. The second attachment is the cover letter and response to the petition (total of 10 pages), which are one PDF. The first attachment matches the original petition, but I believe David Levin already made

this first attachment meta data ready, so we might want to use David's version of the first attachment. Before you move ahead with posting today, could I see one last version of the website (which includes adding the sentence for the information phone line on contrails in a different page)? Let me know if you have any questions.

Thank you,

Bryan

Bryan Manning

U.S. EPA Office of Transportation and Air Quality

Large Marine and Aviation Center

2000 Traverwood Drive

Ann Arbor, MI 48105

(ph) 734-214-4832 (fax) 734-214-4816

manning.bryan@epa.gov

From: Jantarasami, Lesley

Sent: Thursday, December 22, 2016 11:36 AM

To: Manning, Bryan <manning.bryan@epa.gov>

Cc: Maeroff, Bruce <Maeroff.Bruce@epa.gov>; Page, Margaret <Page.Margaret@epa.gov>;
Levin, David <Levin.David@epa.gov>

Subject: RE: Response to Reconsideration Petition FRN + cover letter (OTAQ aviation webpage): aircraft GHG finding FRM

Hello everyone,

Good news – the Administrator signed the response last evening, so we can move ahead with

posting. Attached is the scanned letter + response enclosure in one PDF. The other PDF is just a resend of the petition I've sent to you previously. After discussing with OGC, we would like to wait to post the final Federal Register Notice until we have the official FR publication PDF.

Please let me know if you have questions or if I can be helpful in any way. Have a great holiday!

Thanks,

Lesley

From: Manning, Bryan

Sent: Wednesday, December 21, 2016 12:56 PM

To: Jantarasami, Lesley <Jantarasami.Lesley@epa.gov>

Cc: Maeroff, Bruce <Maeroff.Bruce@epa.gov>; Page, Margaret <Page.Margaret@epa.gov>; Levin, David <Levin.David@epa.gov>

Subject: RE: Response to Reconsideration Petition FRN + cover letter (OTAQ aviation webpage): aircraft GHG finding FRM

Hi Lesley,

Sorry to bother you, but any news on the Administrator signing the response to the reconsideration petition?

Thanks,

Bryan

Bryan Manning

U.S. EPA Office of Transportation and Air Quality

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2000 Traverwood Drive

Ann Arbor, MI 48105

(ph) 734-214-4832 (fax) 734-214-4816

manning.bryan@epa.gov

From: Jantarasami, Lesley

Sent: Tuesday, December 20, 2016 2:26 PM

To: Manning, Bryan <manning.bryan@epa.gov>

Cc: Maeroff, Bruce <Maeroff.Bruce@epa.gov>; Page, Margaret <Page.Margaret@epa.gov>

Subject: RE: Response to Reconsideration Petition FRN + cover letter (OTAQ aviation webpage): aircraft GHG finding FRM

Actually, OGC has recommended that we use this scanned version instead even though it is harder to read. Sorry about that. But OGC did confirm that we don't need to rush anything with regard to posting on the website, so doing everything tomorrow would be fine. Will the right people be in the office tomorrow?

Thanks so much,

Lesley

From: Jantarasami, Lesley

Sent: Tuesday, December 20, 2016 12:46 PM

To: Manning, Bryan <manning.bryan@epa.gov>

Cc: Maeroff, Bruce <Maeroff.Bruce@epa.gov>; Page, Margaret <Page.Margaret@epa.gov>

Subject: RE: Response to Reconsideration Petition FRN + cover letter (OTAQ aviation webpage): aircraft GHG finding FRM

I forgot that one more document that we can prepare now is the actual petition itself (attached).

From: Manning, Bryan

Sent: Monday, December 19, 2016 4:05 PM

To: Jantarasami, Lesley <Jantarasami.Lesley@epa.gov>

Cc: Maeroff, Bruce <Maeroff.Bruce@epa.gov>; Page, Margaret <Page.Margaret@epa.gov>

Subject: RE: Response to Reconsideration Petition FRN + cover letter (OTAQ aviation webpage): aircraft GHG finding FRM

Okay, Lesley. Thanks for the reply. Just to confirm, the letter will be placed before the enclosure in the PDF file. Correct? Sorry for the obvious question, but folks here just wanted to make sure.

Thanks again,

Bryan

Bryan Manning

U.S. EPA Office of Transportation and Air Quality

Large Marine and Aviation Center

2000 Traverwood Drive

Ann Arbor, MI 48105

(ph) 734-214-4832 (fax) 734-214-4816

manning.bryan@epa.gov

From: Jantarasami, Lesley

Sent: Monday, December 19, 2016 2:46 PM
To: Manning, Bryan <manning.bryan@epa.gov>
Cc: Macroff, Bruce <Macroff.Bruce@epa.gov>; Page, Margaret <Page.Margaret@epa.gov>
Subject: RE: Response to Reconsideration Petition FRN + cover letter (OTAQ aviation webpage): aircraft GHG finding FRM

Hi everyone,

We are still aiming for tomorrow, with potential to slip until Wed. The web blurb looked good to me. Attached are the current drafts of the letter and response document, which we could PDF into one file once we have the Administrator's signature on the letter. So I suppose the only part we can do in advance is to PDF the file that says "Enclosure." Let me know if you need anything else!

Thanks,

Lesley

Lesley Jantarasami

U.S. EPA, Climate Change Division

Office of Air & Radiation

jantarasami.lesley@epa.gov

(202)-343-9929

From: Manning, Bryan
Sent: Monday, December 19, 2016 11:20 AM
To: Jantarasami, Lesley <Jantarasami.Lesley@epa.gov>
Cc: Maeroff, Bruce <Maeroff.Bruce@epa.gov>; Page, Margaret <Page.Margaret@epa.gov>
Subject: RE: Response to Reconsideration Petition FRN + cover letter (OTAQ aviation webpage): aircraft GHG finding FRM

Hi Lesley,

Sorry to bother you. In the spirit of helping OTAQ's website folks be prepared, any thoughts on the timing of this response (still aiming for Dec 20)? Of course, if we are trying to issue it tomorrow, then we probably need to see the documents fairly soon? We are assuming that you are okay with the web blurb that OGC commented on late last week.

Thanks,

Bryan

Bryan Manning

U.S. EPA Office of Transportation and Air Quality

Large Marine and Aviation Center

2000 Traverwood Drive

Ann Arbor, MI 48105

(ph) 734-214-4832 (fax) 734-214-4816

manning.bryan@epa.gov

From: Jantarasami, Lesley

Sent: Thursday, December 15, 2016 10:11 AM

To: Manning, Bryan <manning.bryan@epa.gov>

Cc: Audette, Lucie <audette.lucie@epa.gov>; Maeroff, Bruce <Maeroff.Bruce@epa.gov>; Williams, Melina <Williams.Melina@epa.gov>; Thrift, Mike <thrift.mike@epa.gov>; Birgfeld, Erin <Birgfeld.Erin@epa.gov>; Page, Margaret <Page.Margaret@epa.gov>

Subject: RE: Response to Reconsideration Petition FRN + cover letter (OTAQ aviation webpage): aircraft GHG finding FRM

Thanks, Bryan, it would be really helpful if you could take a crack at the web blurb. I'm slammed over here with getting things ready for the Administrator's signature.

Thanks!

Lesley

From: Manning, Bryan
Sent: Thursday, December 15, 2016 9:45 AM
To: Jantarasami, Lesley <Jantarasami.Lesley@epa.gov>
Cc: Audette, Lucie <audette.lucie@epa.gov>; Maeroff, Bruce <Maeroff.Bruce@epa.gov>; Williams, Melina <Williams.Melina@epa.gov>; Thrift, Mike <thrift.mike@epa.gov>; Birgfeld, Erin <Birgfeld.Erin@epa.gov>; Page, Margaret <Page.Margaret@epa.gov>
Subject: Response to Reconsideration Petition FRN + cover letter (OTAQ aviation webpage): aircraft GHG finding FRM

Hi again Lesley,

As I mentioned earlier, our OTAQ web folks are ready to begin the steps put this on our aviation web page. We can take a crack at the web blurb for this if you like. Or, if you or OGC want to draft a blurb for the web page that is fine as well. Let us know your preference. By the way, are web folks realize that Dec 20 is the target date for getting things on the web.

Thanks,

Bryan

Bryan Manning

U.S. EPA Office of Transportation and Air Quality

Large Marine and Aviation Center

2000 Traverwood Drive

Ann Arbor, MI 48105

(ph) 734-214-4832 (fax) 734-214-4816

manning.bryan@epa.gov

From: Jantarasami, Lesley

Sent: Tuesday, December 13, 2016 9:55 AM

To: Manning, Bryan <manning.bryan@epa.gov>

Cc: Audette, Lucie <audette.lucie@epa.gov>

Subject: RE: Reconsideration Petition FRN + cover letter

One more question – would it be ok to post these things to your website? We have this sentence in the FRN:

This action, the petition for reconsideration and the EPA's response addressing the petition can also be found on the EPA's Web site at <https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-finding-greenhouse-gas-emissions-aircraft>.

Thanks,

Lesley

From: Manning, Bryan

Sent: Tuesday, December 13, 2016 8:17 AM

To: Jantarasami, Lesley <Jantarasami.Lesley@epa.gov>

Cc: Audette, Lucie <audette.lucie@epa.gov>

Subject: RE: Reconsideration Petition FRN + cover letter

Hi Lesley,

I left you a voice mail on the final sentence of the cover letter. If you did not get this voice mail, let me know.

Thank you,

Bryan

Bryan Manning

U.S. EPA Office of Transportation and Air Quality

Large Marine and Aviation Center

2000 Traverwood Drive

Ann Arbor, MI 48105

(ph) 734-214-4832 (fax) 734-214-4816

manning.bryan@epa.gov

From: Jantarasami, Lesley

Sent: Monday, December 12, 2016 9:52 AM

To: Audette, Lucie <audette.lucie@epa.gov>; Manning, Bryan <manning.bryan@epa.gov>

Subject: RE: Reconsideration Petition FRN + cover letter

Hi Lucie and Bryan,

Rona asked me to specifically check with you about the final sentence of the cover letter. I followed examples from RFS where it ended with a “thank you and we look forward to working with you...” kind of statement. Rona’s question is whether we end it there or go on to say what we will work with them on (i.e., “as we continue to engage in domestic and international processes regarding greenhouse gas emissions from certain classes of engines used in aircraft”). It seems like an OTAQ policy call about what kind of signal to send, so just let us know what you would like to say there.

Thanks!

Lesley

Lesley Jantarasami

U.S. EPA, Climate Change Division

Office of Air & Radiation

jantarasami.lesley@epa.gov

(202)-343-9929

From: Jantarasami, Lesley

Sent: Friday, December 09, 2016 2:35 PM

To: Williams, Melina <Williams.Melina@epa.gov>; Thrift, Mike <thrift.mike@epa.gov>; Greenglass, Nora <Greenglass.Nora@epa.gov>; Manning, Bryan <manning.bryan@epa.gov>; Audette, Lucie <audette.lucie@epa.gov>

Cc: Orlin, David <Orlin.David@epa.gov>; Rona Birnbaum <Birnbaum.Rona@epa.gov>

Subject: Reconsideration Petition FRN + cover letter

Hi all,

Here is the FR notice of availability and the cover letter that will go with the petition response.

Neither of these docs is very long, so I think we can do a concurrent review. Please let me know if you have comments as soon as you can – we aim to send these draft and revisions back to Janet by early next week (COB Tuesday at the latest).

I've also attached for your reference a clean(er) version of the petition response as it stands now. We've responded to Janet's comments and most of David's. The only remaining question is whether OTAQ management has any desire to include more firm language discussing the non-applicability of the *Framework* to all mobile source categories.

Lesley

From: Williams, Melina

Sent: Monday, December 05, 2016 6:01 PM

To: Thrift, Mike <thrift.mike@epa.gov>; Greenglass, Nora <Greenglass.Nora@epa.gov>; Jantarasami, Lesley <Jantarasami.Lesley@epa.gov>; Manning, Bryan <manning.bryan@epa.gov>; Audette, Lucie <audette.lucie@epa.gov>

Cc: Orlin, David <Orlin.David@epa.gov>

Subject: Reconsideration Petition Response_draft111616 rb+pg+mkw rev 11-29 do 12-4 mkw 12-5

Hi all,

Here's a version of the response to the petition for reconsideration that incorporates David's feedback and some additional edits from me in response to some of his comments. I've flagged a few of these comments for OTAQ, Nora or Mike, so please take a look and let us know what you think.

I need to separately email permitting folks in OGC about one of these (Lesley, I'll cc you on that just so you're in the loop).

Lesley, in terms of the mechanics of the Administrator's signature, we should also prepare both a cover letter for the denial for the Administrator to sign, and an FR notice

of availability. I have samples of both of those documents -- if you need them let me know.

Thanks,

Melina



THE ADMINISTRATOR OF THE ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

DEC 21 2016

Mr. John W. Bode
Chairman
Biogenic CO2 Coalition
Corn Refiners Association
1701 Pennsylvania Avenue, NW
Suite 950
Washington, D.C. 20006

Dear Mr. Bode:

I am responding to Biogenic CO2 Coalition's petition to the U.S. Environmental Protection Agency for reconsideration of the final action, "Finding that Greenhouse Gas Emissions from Aircraft Cause or Contribute to Air Pollution that May Reasonably Be Anticipated to Endanger Public Health and Welfare," which was published in the *Federal Register* on August 15, 2016 (81 FR 54422), and became effective on September 14, 2016.

In its October 14, 2016, petition the Biogenic CO2 Coalition requested reconsideration of this action regarding the agency's treatment of biogenic carbon-dioxide emissions from short-cycle annual herbaceous crops.

The EPA has carefully reviewed the petition and the information provided on the issues it raised. The enclosure explains the EPA's final responses to the petition. For the reasons discussed in the enclosed response, I deny the petition for reconsideration.

This response is the EPA's final decision on the Biogenic CO2 Coalition petition, and to the extent the petition requests additional or different action by the EPA, that request is denied, as explained in the enclosed response. This denial of the petition for reconsideration is effective immediately.

We appreciate your interest in this important matter.

Sincerely,

A handwritten signature in black ink, appearing to read "Gina McCarthy".

Gina McCarthy

Enclosure

Response to the Biogenic CO₂ Coalition's Petition for Reconsideration of the Final Finding that Greenhouse Gas Emissions from Aircraft Cause or Contribute to Air Pollution that May Reasonably Be Anticipated to Endanger Public Health and Welfare

I. Introduction and Background

On July 25, 2016, EPA Administrator McCarthy signed two findings under section 231(a)(2)(A) of the Clean Air Act (CAA, or Act). These findings were that: (1) concentrations of six well-mixed greenhouse gases (GHGs) in the atmosphere endanger the public health and welfare of current and future generations (the endangerment finding), and (2) GHGs emitted from certain classes of engines used in certain aircraft¹ are contributing to the air pollution—the mix of those six GHGs in the atmosphere—that endangers public health and welfare (the cause or contribute finding, or contribution finding). The Administrator made these findings using the same definitions of “air pollution” and “air pollutant” as were used in earlier findings under CAA section 202(a)(1) regarding motor vehicle GHG emissions (2009 Findings), namely the combined mix of six key well-mixed GHGs: carbon dioxide (CO₂), methane, nitrous oxide, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). While the 2009 Findings under CAA section 202(a)(1) relate to GHG emissions from new motor vehicles and new motor vehicle engines, these findings under CAA section 231(a)(2)(A) relate to GHG emissions from certain classes of engines used in certain aircraft. These findings were published in the *Federal Register* on August 15, 2016 (81 FR 54422), and became effective on September 14, 2016 (2016 Findings).

Findings Background

In the 2009 Findings, the Administrator concluded that GHG emissions from new motor vehicles cause or contribute to the air pollution that causes climate change endangering public health and welfare.² In the 2016 Findings under CAA section 231(a)(2)(A), the EPA was informed by and placed considerable weight on the extensive scientific and technical evidence in the record supporting the 2009 Findings under section 202(a) of the CAA, including the major, peer-reviewed scientific assessments used to address the question of whether GHGs in the atmosphere endanger public health and welfare, and on the analytical framework and conclusions upon which the Administrator relied in making the 2009 Findings. The 2016 Findings for aircraft under section 231(a)(2)(A) account for the EPA's careful consideration of the scientific and technical record for the 2009 Findings, the new, major scientific assessments issued since closing the administrative record for the 2009 Findings, and consideration of public comments.

¹ The contribution finding concludes that GHG emissions from certain classes of engines used in “U.S. covered aircraft” contribute to the air pollution that endangers public health and welfare. The finding defines “U.S. covered aircraft” to be subsonic jet aircraft with a maximum takeoff mass (MTOM) greater than 5,700 kilograms and subsonic propeller driven aircraft (e.g., turboprops) with a MTOM greater than 8,618 kilograms. This contribution finding for engines used in U.S. covered aircraft results in the vast majority (89 percent) of total U.S. aircraft GHG emissions being included in this determination.

² The 2009 Findings were upheld by the U.S. Court of Appeals for the District of Columbia Circuit. The Court found that they were consistent with the text and structure of the Clean Air Act, consistent with the U.S. Supreme Court's decision in *Massachusetts v. EPA*, and were based on substantial scientific evidence. *Coalition for Responsible Regulation, Inc. v. Environmental Protection Agency*, 684 F.3d 102 (D.C. Cir. 2012), *reh'g en banc denied*, 2012 U.S. App. LEXIS 25997, 26313, 26315 (D.C. Cir. 2012); *see also Utility Air Reg. Group v. EPA*, 134 S. Ct. 2427, 2438 (2014).

The Clean Air Act and Aircraft Regulation

Section 231(a)(2)(A) of the CAA directs the Administrator of the EPA to, from time to time, propose aircraft engine emissions standards applicable to the emission of any air pollutant from any classes of aircraft engines which in her judgment causes or contributes to air pollution which may reasonably be anticipated to endanger public health or welfare. The EPA did not propose or finalize aircraft engine GHG emissions standards as part of the 2016 Findings for aircraft GHG emissions under section 231(a)(2)(A). The EPA's 2016 Findings for aircraft GHG emissions do not prejudge what future EPA standards will be for engines used in covered aircraft. Instead, the EPA's 2016 Findings are in preparation for a future domestic rulemaking process to adopt future GHG standards. As the EPA explained, the 2016 Findings do not impose obligations on any non-federal entity. 81 FR at 54423. The 2016 Findings triggered EPA's duty under the Clean Air Act to promulgate emission standards applicable to GHG emissions from the classes of aircraft engines included in the contribution finding. Any such future proposed domestic regulatory actions will be open to the appropriate public comment and review, providing opportunity for stakeholders and the public to provide input, as required by CAA section 307(d). As EPA explained, only such future standards will apply to and impose any obligation on any non-federal entity. *Id.*

Petition for Reconsideration

The Biogenic CO₂ Coalition (Petitioner) submitted a petition dated October 14, 2016 asking EPA to reconsider the aircraft GHG endangerment and contribution findings with respect to the Agency's treatment of biogenic carbon dioxide (CO₂) emissions from short-cycle annual herbaceous crops, and raising two issues. First, the Petitioner claims that biogenic CO₂ emissions from agricultural-based feedstocks are carbon neutral or negligible for purposes of emissions accounting under the CAA and must be afforded exempt or *de minimis* status and accounted as carbon neutral. Second, the Petitioner alleges that the 2016 Findings potentially affect future EPA rulemakings with regard to eligibility of agricultural crop-derived feedstocks used in aircraft fuels.

This decision document contains the EPA's response to the petition for reconsideration. As explained in detail below, the Petitioner has not met the criteria for reconsideration under section 307(d)(7)(B) of the Clean Air Act (CAA) for either of the grounds for reconsideration that were raised. Accordingly, EPA is denying the petition for reconsideration of the 2016 Findings as discussed below.

II. Standard for Reconsideration

CAA section 307(d)(7)(B) establishes a procedure governing petitions seeking reconsideration of Agency actions taken pursuant to section 307(d), such as the aircraft GHG endangerment and contribution findings. That section strictly limits petitions for reconsideration both in time and scope. It states that:

Only an objection to a rule or procedure which was raised with reasonable specificity during the period for public comment (including any public hearing) may be raised

during judicial review. If the person raising an objection can demonstrate to the Administrator that it was impracticable to raise such objection within such time or if the grounds for such objection arose after the period for public comment (but within the time specified for judicial review) and if such objection is of central relevance to the outcome of the rule, the Administrator shall convene a proceeding for reconsideration of the rule and provide the same procedural rights as would have been afforded had the information been available at the time the rule was proposed. If the Administrator refuses to convene such a proceeding, such person may seek review of such refusal in the United States court of appeals for the appropriate circuit (as provided in subsection (b) of this section). Such reconsideration shall not postpone the effectiveness of the rule. The effectiveness of the rule may be stayed during such reconsideration, however, by the Administrator or the court for a period not to exceed three months.

Thus the requirement to convene a proceeding to reconsider a rule is based on the petitioner demonstrating to the EPA: (1) that it was impracticable to raise the objection during the comment period, or that the grounds for such objection arose after the comment period but within the time specified for judicial review (*i.e.*, within 60 days after publication of the final rulemaking notice in the *Federal Register*, *see* CAA section 307(b)(1)); and (2) that the objection is of central relevance to the outcome of the rule. Regarding the first criterion for reconsideration, a petitioner must show why the issue could not have been presented during the comment period, either because it was impracticable to raise the issue during that time or because the grounds for the issue arose after the period for public comment (but within 60 days of publication of the final action). Thus, CAA section 307(d)(7)(B) does not provide a forum to request the EPA to reconsider issues that actually were raised, or could have been raised, during the comment period. Regarding the second criterion for reconsideration, an objection is of central relevance to the outcome of the rule only if it provides substantial support for the argument that the regulation should be revised. *Coalition for Responsible Regulation v. EPA*, 684 F.3d 102, 125 (D.C. Cir. 2012).

The petition states that reconsideration is sought “pursuant to CAA section 307(b).” Petition at 1. While section 307(b) acknowledges the possibility that petitions for reconsideration might be filed on an EPA action, it does so only to provide that filing such petitions does not affect the finality of the action or extend the timeframe for filing a petition for judicial review, and does not postpone the effectiveness of the action. The standards and procedures for determining whether to convene reconsideration proceedings are contained in CAA section 307(d)(7)(B), as explained above, not in section 307(b). Petitioner neither cites section 307(d)(7)(B) nor explains why the governing provision’s criteria are satisfied for the objections raised in the petition. The petition never makes any claim that either of its two objections could not have been raised during the public comment period, or that any objections that could not have been raised during the comment period were of central relevance to the outcome of the 2016 Findings. Accordingly, Petitioner has not shown that it is entitled to reconsideration for either objection raised in the petition. This alone supports EPA’s denial of the petition for reconsideration. However, EPA has additionally reviewed the objections raised in the petition under the criteria in CAA section 307(d)(7)(B), and explains below why those criteria are not met.

III. EPA Response to the Objections Raised in the Petition for Reconsideration of the Aircraft GHG Endangerment and Contribution Findings

The Petitioner raises two issues as the basis for its petition for reconsideration. Each issue is discussed and responded to separately in sections III.A and III.B below.

A. Treatment of Biogenic CO₂ Emissions from Agricultural-Based Feedstocks

The Petitioner objects to the EPA's 2016 Findings based on its claim that biogenic CO₂ emissions from agricultural-based feedstocks are carbon neutral or negligible for purposes of emissions accounting under the CAA and must be afforded exempt or *de minimis* status and accounted as carbon neutral. The Petitioner also asserts, "There is no authority in the [CAA] that allows or mandates that EPA ignore the source of feedstocks associated with biogenic CO₂ emissions at stationary sources subject to air emissions permitting under the [CAA], nor allows EPA to ignore the basic science of life cycle analysis applicable to greenhouse gas flows and stocks." Petition at 3. The Petitioner goes on to argue that the EPA did not identify a scientific basis for treating crop-derived CO₂ as 100% equivalent to fossil fuel-derived CO₂ in the following CAA-related contexts: (1) the aircraft endangerment and contribution findings, and (2) as a pollutant subject to regulation for purposes of the Prevention of Significant Deterioration (PSD) or Title V permitting programs. The Petitioner makes a related argument that the EPA did not make a science-based endangerment or contribution finding specifically for crop-derived biogenic CO₂ emissions that shows that these emissions are associated with elevated (as opposed to natural or baseline) atmospheric levels of GHGs.

The EPA finds that the objection raised relating to the treatment of crop-derived biogenic CO₂ emissions does not satisfy the statutory criteria of CAA section 307(d)(7)(B) for reconsideration both because the challenges either could have been raised or actually were raised during the public comment period, and because they are not of central relevance to the outcome of the 2016 Findings.

First, the Petitioner submitted public comments on the EPA's 2015 proposed aircraft GHG endangerment and contribution findings (80 FR 37758), raising the same arguments regarding the alleged carbon neutrality of crop-derived CO₂ emissions and the asserted lack of a scientific basis for treating crop-derived CO₂ emissions the same as fossil fuel-derived CO₂ emissions in the aircraft endangerment and contribution findings and in a PSD/Title V permitting context (available at <https://www.regulations.gov>, docket ID# EPA-HQ-OAR-2014-0828-0916). The EPA responded to the Petitioner's public comments in both the preamble for the 2016 Findings (81 FR at 54446-47, 54460-61) and in the response to comments document (available at <https://www.regulations.gov>, docket ID# EPA-HQ-OAR-2014-0828-1025 at pp. 8-9, 34-35). For these issues, the Petitioner identifies no new information or arguments that were not already stated in their public comments, to which EPA has already fully responded.

In repeating its previously raised objections, the Petitioner raises some additional supporting points that it did not raise in its public comments on the 2015 proposed findings, including its argument that the EPA did not make a science-based endangerment or contribution finding specifically for crop-derived biogenic CO₂ emissions and that EPA needed to show that these

specific emissions, separate from other aircraft-emitted GHGs, are associated with elevated atmospheric levels of GHGs. For these newly raised points, there is no explanation in the petition as to why they could not have been raised during the public comment period, and the EPA is not aware of any reason the points could not have been timely raised in the Petitioner's prior comments on the 2015 proposed findings. Moreover, the Petitioner identifies no new information that became available after the public comment period but within 60 days after publication of the final rulemaking notice in the *Federal Register*, and therefore has not demonstrated that its new points constitute new grounds arising under section 307(d)(7)(B).

Because the objections related to the EPA's consideration of crop-derived biogenic CO₂ emissions either could have been raised or actually were raised during the public comment period, the first criterion under section 307(d)(7)(B) for reconsideration is not met.

Second, even assuming for the sake of argument that the Petitioner could not have raised this objection during the public comment period or that its new points constitute new grounds arising after the comment period closed, the request for reconsideration based on the EPA's consideration of crop-derived biogenic CO₂ emissions is appropriately denied because it is not of central relevance to the outcome of the 2016 Findings. An objection is of central relevance to the outcome of a rule only if it provides substantial support for the argument that the regulation should be revised. *Coalition for Responsible Regulation v. EPA*, 684 F.3d 102, 125 (D.C. Cir. 2012). As the EPA explained in the 2016 Findings, the Administrator has defined the "air pollution" for the endangerment finding and "air pollutant" for the contribution finding under CAA section 231(a)(2)(A) as the combined mix of six well-mixed GHGs—CO₂, methane, nitrous oxide, HFCs, PFCs, and SF₆.

The Administrator had five primary reasons for focusing on this aggregate group of gases for purposes of determining whether their aggregate concentrations endanger public health and welfare and whether aircraft emissions of those GHGs contribute to those concentrations: (1) they share common physical properties that influence their climate effects; (2) on the basis of these common physical properties, they have been determined to be the root cause of human-induced climate change, are the best-understood driver of climate change, and are expected to remain the primary driver of future climate change; (3) they are the common focus of climate change science research and policy analyses and discussions; (4) using the combined mix of these gases as the definitions of "air pollution" and "air pollutant" (versus an individual gas-by-gas approach) is consistent with the science, because risks and impacts associated with GHG-induced climate change are not assessed on an individual gas-by-gas basis; and (5) using the combined mix of these gases is consistent with past EPA practice, where separate substances from different sources, but with common properties, may be treated as a class (e.g., oxides of nitrogen, particulate matter, volatile organic compounds).³ These reasons constituted a reasonable basis for the EPA to group the six well-mixed GHGs as a single class for purposes of the 2016 Findings, and the Agency is not required to undertake a separate endangerment or contribution analysis for each of the six well-mixed gases individually. The Petitioner has not submitted any new scientific or technical information challenging these scientific conclusions about the effects of GHG aggregate concentrations or the contributions of GHG emissions from aircraft to the aggregate GHG concentrations.

³ 81 FR at 54443-54446, 54459.

Additionally, the EPA is not required to make individual endangerment and contribution determinations that account for whether a gas emitted from a particular source category is due to combustion of a particular fossil fuel or feedstock-based fuel. Any given molecule of CO₂, regardless of whether it is derived from biogenic or fossil fuel sources, has the same properties and behaviors in the atmosphere that are relevant to the climate change problem, namely radiative forcing, chemical reactivity, and atmospheric lifetime. As the EPA explained in response to the Petitioner's comments on the 2015 proposed findings, any differential treatment of biogenic CO₂ in the context of the 2016 Findings would be inconsistent with the primary scientific basis (*i.e.*, the five reasons described above) for the grouping of the six well-mixed GHGs as a single class for purposes of identifying the endangering air pollution and contributing air pollutant emissions. The 2016 Findings explain that the analytical framework for the endangerment and contribution findings is focused on the emission of air pollutants from classes of aircraft engines which in the Administrator's judgment cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare. The origin and constitution of a fuel prior to its combustion and the subsequent release of emissions into the atmosphere are not relevant in the context of the endangerment and contribution findings and have no bearing on the five primary reasons for focusing on the aggregate group of GHGs. The 2016 Findings explain that the major, peer-reviewed scientific assessments of climate change continue to support the fundamental scientific understanding regarding the intrinsic physical, chemical, and atmospheric properties of emissions of CO₂ and the other well-mixed GHGs that are relevant to the climate change problem (81 FR 54443). All emissions of CO₂ and the other well-mixed GHGs—no matter their original source—become globally well mixed in the atmosphere, trap outgoing heat that would otherwise escape to space, and all are directly emitted from a source as a GHG rather than becoming a GHG in the atmosphere after emission of a precursor gas (81 FR 54443). Moreover, commenters also raised this issue in the 2009 Findings, and in the 2016 Findings the EPA cites its response in the record of the 2009 Findings, stating that “all CO₂ emissions, regardless of source, influence radiative forcing equally once it reaches the atmosphere and therefore there is no distinction between biogenic and non-biogenic CO₂ regarding the CO₂ and the other well-mixed GHGs within the definition of air pollution that is reasonably anticipated to endanger public health and welfare” (81 FR 54446 (internal citation omitted)).

In addition, the Petitioner's statements that EPA may not “ignore the source of the feedstocks associated with biogenic CO₂ emissions at stationary sources subject to air emissions permitting under the [CAA]” are not relevant in the context of these findings, which address aircraft engine source categories that are the focus of CAA section 231, not stationary source permitting requirements.

For all the reasons stated above, this issue does not provide substantial support for revising the 2016 Findings, and Petitioner has failed to demonstrate that this objection is of central relevance to the outcome of the 2016 Findings. The EPA is therefore denying reconsideration of the findings based on this objection, both because these issues either could have been raised or actually were raised during the public comment period, and because they are not of central relevance to the outcome of the action.

B. Treatment of Crop-Derived Feedstocks in Aircraft Fuels

The Petitioner's second objection does not relate to any direct impacts of the 2016 Findings themselves, but addresses potential future EPA rulemakings with regard to eligibility of agricultural crop-derived feedstocks used in aircraft fuels. The Petitioner does not specify what is meant by "eligibility" in this context (e.g., eligible for what), but asserts that the EPA does not have authority to condition eligibility on the means of agricultural production or processing of a crop-derived feedstock, such as placing restrictions based on an evaluation of the sustainability of farming, agricultural production or processing practices. The Petitioner argues that such action, were it to be taken in an unspecified separate future rulemaking, would exceed EPA's CAA authority and intrude on the States' and U.S. Department of Agriculture's (USDA's) authorities over farming, farm fields, and agricultural practices. The Petitioner goes on to describe how it believes the EPA already overstepped its authority on this issue in its Clean Power Plan (another rulemaking that was independent of and outside the scope of the 2016 Findings), and that any similar application in the context of aircraft would be equally unacceptable.

This objection was not raised during the public comment period on the proposed findings. The Petitioner has not provided any reason why it was impracticable to raise this objection during the public comment period or demonstrated that the grounds arose after that period. Accordingly, the EPA finds that the first statutory criterion for granting reconsideration is not met. However, even if this challenge could not have been presented during the public comment period, denial of reconsideration on this objection is warranted because it is not of central relevance to the outcome of the aircraft GHG endangerment and contribution findings.

As noted above, an objection is of central relevant to the outcome of a rule only if it provides substantial support for the argument that the regulation should be revised. *Coalition for Responsible Regulation v. EPA*, 684 F.3d 102, 125 (D.C. Cir. 2012). In the 2016 Findings, the EPA did not take any action with respect to aircraft fuels or the eligibility of agricultural crop-derived feedstocks to be used in such fuels. Any such action would have been outside the scope of these findings, which are scientific determinations that GHGs emitted from certain classes of engines used in certain aircraft cause or contribute to air pollution that may reasonably be anticipated to endanger public health and welfare. The 2016 Findings do not prejudice how any future rulemakings addressing aircraft engine GHG standards will be promulgated, nor how the regulation of aircraft fuels may be affected. For most mobile sources subject to EPA emission standards, EPA issues separate regulations for fuels under section 211 of the Clean Air Act. However, the EPA does not regulate aviation fuels. Rather, such fuels fall within the FAA's regulatory authority. 49 U.S.C. § 44714. The 2016 Findings in no way prejudice how the FAA may undertake such regulation in the future.

In fact, this objection does not refer to any aspect of the action actually taken in the 2016 Findings, but rather challenges a hypothetical action that the Petitioner is concerned that the EPA (or the FAA) might take in future actions because of statements that the EPA made in an entirely separate action. Because this objection does not raise concerns with or relate to the effect of any action the EPA took in the 2016 Findings, or with any statement made in the 2016 Findings, it

cannot provide substantial support for the argument that the 2016 Findings themselves must be revised. Even if the EPA had regulatory authority over aviation fuels, which it does not, an objection relating to the speculative possibility that the EPA might take a particular action in regulating such fuels in the future is not of central relevance to the present action for which reconsideration is sought – the endangerment and contribution findings, which simply trigger EPA’s statutory duty to promulgate aircraft engine emission standards and have no direct effect on any entity outside the federal government.

The EPA is therefore denying reconsideration of the findings based on this objection both because the Petitioner has not demonstrated that it could not have been presented during the public comment period and because it is not of central relevance to the outcome of the 2016 Findings.

C. Other Arguments Not Raised as a Basis for Reconsideration

In the petition for reconsideration, but not identified as a basis for reconsideration, the Petitioner made a number of requests to the EPA. The first request is for the Agency to categorically exclude from the section 231 endangerment and contribution findings those CO₂ emissions resulting from the combustion of biofuels derived from annual herbaceous crops. The second request is for the EPA to “expressly confirm that such exclusion prevents any standard of performance for aircraft resulting from any endangerment or cause or contribute finding under section 231 from making such CO₂ ‘a pollutant subject to regulation’ for purposes of the PSD and Title V permitting programs under the Clean Air Act.” Petition at 4. The Petitioner requested that if the EPA does not exclude such CO₂ emissions categorically, the Agency should complete the development of and apply its Biogenic Accounting Framework (specifically establishing a default factor of zero for biogenic CO₂ emissions) within the context of any findings and any future standards under section 231.

These same requests were raised in the Petitioner’s public comments on the EPA’s 2015 proposed aircraft GHG endangerment and contribution findings (80 FR 37758) (available at <https://www.regulations.gov>, docket ID# EPA-HQ-OAR-2014-0828-0916). The EPA fully responded to these comments, as explained below. The Petitioner identifies no new information or arguments that were not already stated in their public comments; therefore, even if these points were identified as a basis for reconsideration, which they were not, they would not meet the first statutory criterion under section 307(d)(7)(B) for granting reconsideration.

These points also do not meet the second statutory criterion for granting reconsideration because they are not of central relevance to the outcome of the 2016 Findings. As discussed in the response to comments document for the 2016 Findings (available at <https://www.regulations.gov>, docket ID# EPA-HQ-OAR-2014-0828-1025 at pp. 8-9), the EPA’s 2014 revised draft *Framework for Assessing Biogenic CO₂ Emissions from Stationary Sources* (hereafter, *Framework*) presents a methodological framework for assessing the extent to which the production, processing, and use of biogenic material at stationary sources for energy production results in a net atmospheric contribution of biogenic CO₂ emissions. The EPA Science Advisory Board is currently engaged in a second round of targeted peer review on the *Framework*. However, any findings reached in the context of the *Framework*’s technical process

would not change the primary scientific basis of the definition of the air pollution for purposes of the 2016 endangerment finding (*i.e.*, the five reasons described in section III.A above). Thus, the EPA does not agree that the *Framework* is relevant in the context of the endangerment finding.

In addition, because the EPA did not create such a categorical exclusion in the 2016 Findings and, for the reasons explained above, is not doing so in this action, it need not address what the scope or effect of such an exclusion might be for the PSD and title V permitting programs. Regulation of such substances under these permitting programs is a separate issue that the EPA is handling separately. Moreover, as the EPA explained in 2010 (after the 2009 Findings), it does not view an endangerment finding or cause and contribute finding alone as making the requirements of the major source permitting programs applicable to a pollutant. *See* 75 FR 17012-13 (discussing PSD) and *id.* at 17023 (applying a similar approach for title V as for PSD). This interpretation applies for an endangerment finding under CAA section 231, in light of the analogous language and structure of sections 202 and 231. Furthermore, as with the 2009 Findings, while the endangerment and contribution findings for aircraft GHG emissions under section 231(a)(2)(A) are a necessary preliminary step to establishing emissions standards under CAA section 231, this action is not establishing such emissions standards or otherwise establishing requirements for the actual control of aircraft GHG emissions.

In addition, the 2016 Findings address the same GHG air pollution and GHG air pollutant that are addressed in the 2009 Findings. The 2009 Findings led to the promulgation of emissions standards under CAA section 202(a) in 2010 in the Light Duty Vehicle Rule. 75 FR 25324. When controls on GHGs in the Light Duty Vehicle rule took effect, the pollutant GHGs became a pollutant “subject to regulation under the Act,” and therefore subject to PSD and title V requirements. 75 FR 17004 (identifying January 2, 2011, as the date when GHGs first became subject to regulation).

IV. Conclusion

For the reasons described above, the Biogenic CO₂ Coalition’s petition for reconsideration of the 2016 Findings that Greenhouse Gas Emissions from Aircraft Cause or Contribute to Air Pollution that May Reasonably Be Anticipated to Endanger Public Health and Welfare, published at 81 FR 54422 (Aug. 15, 2016), is denied. This response is EPA’s final decision on the Biogenic CO₂ Coalition’s petition for reconsideration, and to the extent the petition requests additional or different action by EPA, that request is denied for the reasons set forth herein, and in the record of the 2016 Findings. This denial of the Biogenic CO₂ Coalition’s petition for reconsideration is effective immediately.

From: Manning, Bryan
Location: AA-Room-Office-N62-ASDCDConfRoom/AA-OTAQ-OFFICE
Importance: Normal
Subject: FAA/MIT cost-benefit analysis: Call for staff (call **Ex. 6 - Personal Privacy**)
Start Date/Time: Wed 11/18/2015 6:00:00 PM
End Date/Time: Wed 11/18/2015 7:00:00 PM
2015 11 17 Technical comments on FAA CO2 informational CBA.DOCX

Hello,

Call **Ex. 6 - Personal Privacy** For this staff call, we will discuss the attached draft technical comments (which OAP and OP/NCEE provided earlier today) on the draft US info papers with the FAA/MIT cost-benefit analysis. We are having this call prior to sending our comments to FAA. Look forward to talking to you tomorrow at 1:00 pm eastern.

Thanks,

Bryan

Message

From: Yen, David [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=865CA449DD0F405A949A635615E68827-YEN, DAVID]
Sent: 10/4/2017 7:56:22 PM
To: Lindsey, Leah [lindsey.leah@epa.gov]; Gerring, Holly [gerring.holly@epa.gov]
Subject: FW: Tables used in aircraft GHG endangerment FRM from 2016 EPA GHG & Sinks report
Attachments: Attachment 2_Calculations for Aircraft GHG Cause or Contribute Finding_7-20-16.xlsx

From: Manning, Bryan
Sent: Tuesday, October 04, 2016 10:21 AM
To: Yen, David <Yen.David@epa.gov>
Subject: Tables used in aircraft GHG endangerment FRM from 2016 EPA GHG & Sinks report

Hi David,

Attached please find the file/table that I used in the contribution finding portion of the aircraft GHG endangerment FRM – based on the 2016 EPA GHG & Sinks report (with the ERG adjustment included to determine covered aircraft GHG emissions). In the tab (worksheet) labeled, “ERG adj Preamb 2016,” see the table starting on cell A17 (and ending on cell J39) for U.S. aircraft GHG emissions (total U.S. and U.S. covered aircraft GHG emissions) – for the years 1990, 1995, 2000, 2005, 2010, 2011, 2012, 2013, and 2014. If you are having trouble seeing or understanding the other tabs (or worksheets) that connect to this table, let me know. Or, contact me if you have any questions. Note, the tabs (or worksheets) labeled, “2016 GHG & Sinks” and “ERG adjust 2016” are the main tabs that are behind this table.

Thanks,

Bryan

Bryan Manning
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